

STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/182,968A
FILING DATE: 13-JANUARY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/882,888
FILING DATE: 14-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 205/277
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 332:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-182-968A-332

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 10;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
Db 4 CGUUCGCUUCGC 15

RESULT 2
US-08-774-306A-332
Sequence 332, Application US/08774306A
Patent No. 5869253
GENERAL INFORMATION:
APPLICANT: Draper, Kenneth G.
TITLE OF INVENTION: METHOD AND REAGENT FOR
INHIBITING HEPATITIS C
TITLE OF INVENTION: INHIBITING HEPATITIS C
NUMBER OF SEQUENCES: 497
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/774,306A
FILING DATE: December 26, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:

NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 223/227
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 332:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-774-306A-332

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 10;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
Db 4 CGUUCGCUUCGC 15

RESULT 3
US-09-064-156A-332
Sequence 332, Application US/09064156A
Patent No. 6132966
GENERAL INFORMATION:
APPLICANT: Draper, Kenneth G.
TITLE OF INVENTION: METHOD AND REAGENT FOR
INHIBITING HEPATITIS C
TITLE OF INVENTION: VIRUS REPLICATION
NUMBER OF SEQUENCES: 498
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/774,306
FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 332:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-064-156A-332

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 10;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 21 CGTTCGCTTCG 32
Db 4 CGUUGCUUCG 15

RESULT 4
US-09-728-451-16
; Sequence 16, Application US/09728451
; Patent No. 6458544
; GENERAL INFORMATION:
; APPLICANT: Miller, Andrew P.
; APPLICANT: DNA Sciences, Inc.
; TITLE OF INVENTION: Methods for Determining Single Nucleotide Variations
; TITLE OF INVENTION: and Genotyping
; FILE REFERENCE: 019553-000410US
; CURRENT APPLICATION NUMBER: US/09/728,451
; CURRENT FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: US 60/168,580
; PRIOR FILING DATE: 1999-12-02
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:unsuitable
; OTHER INFORMATION: sequence for variant site primer
US-09-728-451-16

Query Match 14.8%; Score 11.4; DB 1; Length 14;
Best Local Similarity 92.3%; Pred. No. 11;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 26 GCTTCGCTCACTC 38
Db 2 GCTACGCTCACTC 14

RESULT 5
US-08-292-620A-403
; Sequence 403, Application US/08292620A
; Patent No. 5837542
; GENERAL INFORMATION:
; APPLICANT: Susan Grimm
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0

SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/292,620A
FILING DATE: August 17, 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 208/149
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 483-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 403:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-292-620A-403

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 14;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 18 AGTCGTCGCTTC 30
Db 2 AGUGGCGCUUC 14

RESULT 6
US-08-292-620A-617
; Sequence 617, Application US/08292620A
; Patent No. 5837542
; GENERAL INFORMATION:
; APPLICANT: Susan Grimm
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/292,620A
FILING DATE: August 17, 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application

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; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 208/149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 617:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-292-620A-617

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 14;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 18 AGTCGTCGCTTC 30
Db 2 AGUCGUCGCUUC 14

RESULT 7
US-09-071-845-403
; Sequence 403, Application US/09071845
; Patent No. 6132967
; GENERAL INFORMATION:
; APPLICANT: Susan Grimm
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/071,845
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/292,620
; FILING DATE: August 17, 1994
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 208/149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 617:

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 14;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 18 AGTCGTCGCTTC 30
Db 2 AGUCGUCGCUUC 14

RESULT 8
US-09-071-845-617
; Sequence 617, Application US/09071845
; Patent No. 6132967
; GENERAL INFORMATION:
; APPLICANT: Susan Grimm
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/071,845
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/292,620
; FILING DATE: August 17, 1994
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 208/149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 617:

```

two

SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-071-845-167

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 14;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 18 AGTCGTTCAAGTTC 30
||:|:|:|:|:|:|
Db 2 AGUCGUCGCUUC 14

RESULT 9

US-09-660-552-13
; Sequence 13, Application US/09660552
; Patent No. 633178

GENERAL INFORMATION:

; APPLICANT: LIVNEH, Zvi

; APPLICANT: BACHER REUVEN, Nina

; APPLICANT: TOMER, Guy

; TITLE OF INVENTION: METHODS OF REPLICATING A DNA MOLECULE FOR REPAIR OF DNA

; TITLE OF INVENTION: LESION DAMAGE

; TITLE OF INVENTION: OR FOR MUTAGENESIS

; FILE REFERENCE: LIVNEH-1B

; CURRENT APPLICATION NUMBER: US/09/660,552

; CURRENT FILING DATE: 2000-09-12

; PRIOR APPLICATION NUMBER: 09/627,399

; PRIOR FILING DATE: 2000-07-27

; PRIOR APPLICATION NUMBER: 60/146,162

; PRIOR FILING DATE: 1999-07-30

; NUMBER OF SEQ ID NOS: 31

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 13

; LENGTH: 15

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:

; OTHER INFORMATION: oligonucleotide

US-09-660-552-13

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 14;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 10 CTGGTTCAGTCG 22
|||||:|:|:|:|:|
Db 1 CTGGTTCAGTAG 13

RESULT 10

US-09-660-552-16
; Sequence 16, Application US/09660552
; Patent No. 633178

GENERAL INFORMATION:

; APPLICANT: LIVNEH, Zvi

; APPLICANT: BACHER REUVEN, Nina

; APPLICANT: TOMER, Guy

; TITLE OF INVENTION: METHODS OF REPLICATING A DNA MOLECULE FOR REPAIR OF DNA

; TITLE OF INVENTION: LESION DAMAGE

; TITLE OF INVENTION: OR FOR MUTAGENESIS

; FILE REFERENCE: LIVNEH-1B

; CURRENT APPLICATION NUMBER: US/09/660,552

; CURRENT FILING DATE: 2000-09-12

; PRIOR APPLICATION NUMBER: 09/627,399

; PRIOR FILING DATE: 2000-07-27

; PRIOR APPLICATION NUMBER: 60/146,162

; PRIOR FILING DATE: 1999-07-30

; NUMBER OF SEQ ID NOS: 31

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16

; LENGTH: 15

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:

; OTHER INFORMATION: oligonucleotide

US-09-660-552-16

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 14;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 10 CTGGTTCAGTCG 22
|||||:|:|:|:|:|
Db 1 CTGGTTCAGTAG 13

RESULT 11

US-09-728-451-15
; Sequence 15, Application US/09728451
; Patent No. 6458544

GENERAL INFORMATION:

; APPLICANT: MILLER, Andrew P.

; APPLICANT: DNA Sciences, Inc.

; TITLE OF INVENTION: Methods for Determining Single Nucleotide Variations

; TITLE OF INVENTION: and Genotyping

; FILE REFERENCE: 019553-000410US

; CURRENT APPLICATION NUMBER: US/09/728,451

; CURRENT FILING DATE: 2000-12-01

; PRIOR APPLICATION NUMBER: US 60/168,580

; PRIOR FILING DATE: 1999-12-02

; NUMBER OF SEQ ID NOS: 17

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 15

; LENGTH: 15

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: variant site

; OTHER INFORMATION: primer

US-09-728-451-15

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 14;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 26 GCTTCGCTCACTC 38
|||||:|:|:|:|:|
Db 2 GCTACGCTCACTC 14

RESULT 12

US-09-479-005A-456/c
; Sequence 456, Application US/09479005A
; Patent No. 6656731

GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Nucleic Acid Catalysts with Endonuclease Activity

; FILE REFERENCE: MBH00-884-C

; CURRENT APPLICATION NUMBER: US/09/479,005A

; CURRENT FILING DATE: 2000-01-07

; PRIOR APPLICATION NUMBER: US 09/444,209

; PRIOR FILING DATE: 1999-11-19

; PRIOR APPLICATION NUMBER: US 09/159,274

; PRIOR FILING DATE: 1998-09-22

; PRIOR APPLICATION NUMBER: US 60/059,473

; PRIOR FILING DATE: 1997-09-22

; NUMBER OF SEQ ID NOS: 1208

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 456

; LENGTH: 16

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; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-479-005A-456

Query Match      14.8%; Score 11.4; DB 1; Length 16;
Best Local Similarity 92.3%; Pred. No. 18;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 AACAACTGGTTCA 17
Db 13 AACAACTGGATCA 1

RESULT 13
US-08-411-795B-29/c
; Sequence 29, Application US/08411795B
; Patent No. 5604116
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Maire H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olin, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/411,795B
; FILING DATE: 04-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981,044
; FILING DATE: 24-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
US-08-411-795B-29

Query Match      14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-479-005A-456

Query Match      14.8%; Score 11.4; DB 1; Length 16;
Best Local Similarity 92.3%; Pred. No. 18;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 AACAACTGGTTCA 17
Db 13 AACAACTGGATCA 1

RESULT 14
US-08-411-795B-168/c
; Sequence 168, Application US/08411795B
; Patent No. 5604116
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Maire H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olin, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/411,795B
; FILING DATE: 04-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981,044
; FILING DATE: 24-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
US-08-411-795B-168

Query Match      14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 15
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US-08-411-796-29/c
; Sequence 29, Application US/08411796
; Patent No. 5677149
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mair H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olines, Peter O.
; APPLICANT: Paik, Kumnan
; APPLICANT: Polazzi, Joseph O.
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE: US/08/411,796
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11198
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/1
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
US-08-411-796-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 16
US-08-469-319A-29/c
; Sequence 29, Application US/08469319A
; Patent No. 5817486
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.

; APPLICANT: Caparon, Mair H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olines, Peter O.
; APPLICANT: Paik, Kumnan
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; TITLE OF INVENTION: Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,319A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981,044
; FILING DATE: 24-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/6
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
US-08-469-319A-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 17
US-08-469-319A-168/c
; Sequence 168, Application US/08469319A
; Patent No. 5817486
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mair H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olines, Peter O.
; APPLICANT: Paik, Kumnan
; APPLICANT: Thomas, John W.

```

; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; TITLE OF INVENTION: Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,319A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981,044
; FILING DATE: 24-NOV-1992
; APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708) 470-6501
; TELEFAX: (708) 470-6881
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; US-08-469-319A-168

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels

QY 2 CCTAACAACCTGGTTCA 17
DB 16 CCTGACATATGGTTCA 1

RESULT 18
US-08-471-039-29/c
; Sequence 29, Application US/08471039
; Patent No. 6017523
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Maire H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olines, Peter O.
; APPLICANT: Paik, Kumnan
; APPLICANT: Polazzi, Joseph O.
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110

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;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/764.114
; FILING DATE: 09-DEC-1996
; CLASSIFICATION: 514
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/981.044
; FILING DATE: 24-NOV-1992
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: 04-JUN-1995
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
;
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
;
; US-08-764-114-29
;
; Query Match 14.5%; Score 11.2; DB 1; Length 16;
; Best Local Similarity 81.2%; Pred. No. 20;
; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
;
; QY 2 CCTAACACTGGTTCA 17
; DB 16 CCTGACATATGGTTCA 1
;
; RESULT 20
; US-08-764-114-168/C
; Sequence 168, Application US/08764114
; Patent No. 6440407
;
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Maire H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olins, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
;
; TITLE OF INVENTION: Methods of Ex-vivo Expansion of
; Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple
; Mutation Polypeptides
;
; NUMBER OF SEQUENCES: 415
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/764.114
; FILING DATE: 09-DEC-1996
; CLASSIFICATION: 514
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/981.044
; FILING DATE: 24-NOV-1992
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: 04-JUN-1995
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
;
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
;
; US-08-764-114-168
;
; Query Match 14.5%; Score 11.2; DB 1; Length 16;
; Best Local Similarity 81.2%; Pred. No. 20;
; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
;
; QY 2 CCTAACACTGGTTCA 17
; DB 16 CCTGACATATGGTTCA 1
;
; RESULT 21
; US-08-469-419-29/c
; Sequence 29, Application US/08469419
; Patent No. 6458931
;
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Maire H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olins, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
;
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; Polypeptides
;
; NUMBER OF SEQUENCES: 415
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
;
; CURRENT APPLICATION DATA: US/08/469,419
; FILING DATE: 06-Jun-1995
; CLASSIFICATION: <Unknown>

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;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: <Unknown>
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-08-469-419-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 22
US-08-469-419-168/c
; Sequence 168, Application US/08469419
; Patent No. 6458931
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Bradford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Oline, Peter O.
; Paik, Kumnan
; Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,419
; FILING DATE: 06-Jun-1995
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: <Unknown>
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
```

```
;
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 168:
US-08-469-419-168

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 23
US-08-559-390-29/c
; Sequence 29, Application US/08559390
; Patent No. 6479261
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Bradford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Oline, Peter O.
; Paik, Kumnan
; Polazzi, Joseph O.
; Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/559,390
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,796
; FILING DATE:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11198
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
```

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; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
US-08-559-390-29
Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1

RESULT 24
US-09-479-005A-224/c
; Sequence 224, Application US/09479005A
; Patent No. 6656731
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic Acid Catalysts with Endonuclease Activity
; FILE REFERENCE: MBH00-884-C
; CURRENT APPLICATION NUMBER: US/09/479,005A
; CURRENT FILING DATE: 2000-01-07
; PRIOR APPLICATION NUMBER: US 09/444,209
; PRIOR FILING DATE: 1999-11-19
; PRIOR APPLICATION NUMBER: US 09/159,274
; PRIOR FILING DATE: 1998-09-22
; PRIOR APPLICATION NUMBER: US 60/059,473
; PRIOR FILING DATE: 1997-09-22
; NUMBER OF SEQ ID NOS: 1208
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 224
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-479-005A-224

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 8 AACTGTTCAAGTCGT 23
Db 16 AACTGCATCAAGTCAT 1

RESULT 25
US-09-244-438-7
; Sequence 7, Application US/09244438
; Patent No. 6777203
; GENERAL INFORMATION:
; APPLICANT: Morin, Gregg B.
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Adams, Robert R.
; APPLICANT: Geron Corporation
; TITLE OF INVENTION: Telomerase Reverse Transcriptase Transcriptional
; FILE REFERENCE: 019/246P
; CURRENT APPLICATION NUMBER: US/09/244,438
; CURRENT FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence

; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: RA97
US-09-244-438-7

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 17 AAGTCGTTGCTGCGC 32
Db 1 AATTCGTAGCTTCGC 16

RESULT 26
PCT-US93-11198-29/c
; Sequence 29, Application PC/TUS9311198
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mair H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Paik, Kumnan
; APPLICANT: Olin, Peter O.
; APPLICANT: Polazzi, Joseph O.
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESS: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/11198
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
PCT-US93-11198-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 20;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17
Db 16 CCTGACATATGGTTCA 1
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RESULT 27
US-09-723-942-31
; Sequence 31, Application US/09723942
; Patent No. 6747131
; GENERAL INFORMATION:
; APPLICANT: Pestka, S.
; TITLE OF INVENTION: MODIFIED PROTEINS, MODIFIED INTERFERONS, ALPHAS AND BETA, PHOSPHO
; FILE REFERENCE: PBLI-P07-004
; CURRENT APPLICATION NUMBER: US/09/723,942
; CURRENT FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: 08/487,057
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 31
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-723-942-31

Query Match      14.3%; Score 11; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 6.2;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      8  AACTGGTTCAA 18
      |||||
Db      1  AACTGGTTCAA 11

RESULT 28
US-08-182-968A-331
; Sequence 331, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 331:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15

Query Match      14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 18;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      22 GTTCGCTTCG 32
      ||:||||:
Db      1  GUUCGCUUCG 11

RESULT 30
US-08-774-306A-331
; Sequence 331, Application US/08774306A
; Patent No. 5869253
```

```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-182-968A-331

Query Match      14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 18;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      21 CGTTCGCTTCG 31
      ||:||||:
Db      5  CGUUCGCUUCG 15

RESULT 29
US-08-182-968A-333
; Sequence 333, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 333:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-182-968A-333

Query Match      14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 18;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      22 GTTCGCTTCG 32
      ||:||||:
Db      1  GUUCGCUUCG 11

RESULT 30
US-08-774-306A-331
; Sequence 331, Application US/08774306A
; Patent No. 5869253
```



```

; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/774,306A
; FILING DATE: December 26, 1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 223/227
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 331:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-774-306A-331

```

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 18;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```

QY 21 CGTTCGCTTCG 31
Db 5 CGUUCGCUUCG 15

```

```

RESULT 31
US-08-774-306A-333
; Sequence 333, Application US/08774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

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```

; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/774,306A
; FILING DATE: December 26, 1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 223/227
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 333:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-774-306A-333

```

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 18;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```

QY 22 GTTCGCTTCG 32
Db 1 GUUCGCUUCG 11

```

```

RESULT 32
US-08-493-071-29
; Sequence 29, Application US/08493071
; Patent No. 6127149
; GENERAL INFORMATION:
; APPLICANT: Hirai, Yohei
; APPLICANT: Koshida, Shogo
; APPLICANT: Oka, Yumiko
; TITLE OF INVENTION: MODIFIED EPIMORPHIN
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LOWE, PRICE, LEBLANC & BECKER
; STREET: 99 CANAL CENTER PLAZA, SUITE 300
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/493,071
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Price, Robert L.
; REGISTRATION NUMBER: 22,685
; REFERENCE/DOCKET NUMBER: 715-107
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-684-1111
; TELEFAX: 703-684-1124
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs

```

teach amplification
 using seq
 29 as primer
 do not discuss
 detection

```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
US-08-493-071-29
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 18;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 CGGGACCGGCT 48
|||||
Db 4 CGGGACCGGCT 14

RESULT 33
US-09-064-156A-331
; Sequence 331, Application US/09064156A
; Patent No. 6132966
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 498
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/064,156A
; FILING DATE: April 21, 1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/774,306
; FILING DATE: December 26, 1996
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 234/083
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 331:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-064-156A-331
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 18;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 21 CGTTCGGCTTCG 31
|||||
Db 5 CGUUCGCUUCG 15

RESULT 34
US-09-064-156A-333
; Sequence 333, Application US/09064156A
; Patent No. 6132966
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 498
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/064,156A
; FILING DATE: April 21, 1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/774,306
; FILING DATE: December 26, 1996
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 234/083
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 333:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-064-156A-333
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 18;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 22 GTTCGGCTTCG 32
|||||
Db 1 GUUCGCUUCG 11

RESULT 35
US-08-182-968A-419/c
; Sequence 419, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
```

STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/182,968A
FILING DATE: 13-JANUARY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/882,888
FILING DATE: 14-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 205/277
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 955-0440
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 419:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-182-968A-419

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 56 GCCCCTTAACCAA 69
DB 14 GCCCATAGCCCAA 1

RESULT 36
US-08-363-240A-766/c
Sequence 766, Application US/08363240A
Patent No. 5705388
GENERAL INFORMATION:
APPLICANT: Couture, Larry
APPLICANT: McSwiggen, James
APPLICANT: Bisgaier, Charles
TITLE OF INVENTION: METHOD AND REAGENT FOR
PREVENTION, INHIBITION OF
PROGRESSION AND REGRESSION
OF VASCULAR DISEASES
NUMBER OF SEQUENCES: 1243
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
CITY: Suite 4700
STATE: Los Angeles
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/363,240A
FILING DATE: December 23, 1994

STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/363,240A
FILING DATE: December 23, 1994

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 210/096
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 766:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-363-240A-766

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 43 CCGCTAAAGCCGG 56
DB 15 CAGGCTAAAGCCAG 2

RESULT 37
US-08-363-240A-767/c
Sequence 767, Application US/08363240A
Patent No. 5705388
GENERAL INFORMATION:
APPLICANT: Couture, Larry
APPLICANT: McSwiggen, James
APPLICANT: Bisgaier, Charles
APPLICANT: Pape, Michael
TITLE OF INVENTION: METHOD AND REAGENT FOR
PREVENTION, INHIBITION OF
PROGRESSION AND REGRESSION
OF VASCULAR DISEASES
NUMBER OF SEQUENCES: 1243
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
CITY: Suite 4700
STATE: Los Angeles
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/363,240A
FILING DATE: December 23, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 210/096
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 767:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs

; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-363-240A-767

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 43 CCGCTAAAGCCG 56
Db 14 CAGGCTAAAGCCAG 1

RESULT 38

US-08-774-306A-419/c
; Sequence 419, Application US/08774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066

COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/774,306A
; FILING DATE: December 26, 1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 223/227
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 955-0440
; TELEFAX: 67-3510
; INFORMATION FOR SEQ ID NO: 419:

SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-774-306A-419

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCAAA 69
Db 14 GCCCATAGCCAAA 1

RESULT 39

US-09-064-156A-419/c

; Sequence 419, Application US/09064156A
; Patent No. 6132966
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.

; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 498
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066

COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/064,156A
; FILING DATE: April 21, 1998

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/774,306
; FILING DATE: December 26, 1996
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:

; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 234/083
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510

; INFORMATION FOR SEQ ID NO: 419:

SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-064-156A-419

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCAAA 69
Db 14 GCCCATAGCCAAA 1

RESULT 40

US-08-871-732A-13/c
; Sequence 13, Application US/08871732A
; Patent No. 6140074
; GENERAL INFORMATION:

; APPLICANT: O'BRIEN, TIMOTHY J.
; APPLICANT: WANG, YIN

; TITLE OF INVENTION: NOVEL SH3 PROTEIN, GENE, CHIMERIC
; TITLE OF INVENTION: CELLS, VECTORS AND EXPRESSION METHOD FOR PRODUCING THE NOVEL
; TITLE OF INVENTION: PROTEIN, ANTIBODIES AND USES
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MARTIN L. MCGREGOR
; STREET: 5380 WEST 34TH STREET, #345
; CITY: HOUSTON
; STATE: TEXAS

```
Query Match      14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 20;
Matches 12: Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

Qy 48 TAAAGCCGGCCCCCT 61
|||
Db 15 TAAAGCCGGGACCT 2

RESULT 43

QY 48 TAAAGCCGGCCCCCT 61

RESULT 44

Patent No. 0280970
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Beigelman, Leo
APPLICANT: Burgin, Alex
APPLICANT: Beaudry, Amber
APPLICANT: Karpeisky, Alex

; APPLICANT: Adamic, Jasenka
; APPLICANT: Sweedler, David
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide triphosphate and their incorporation into oligonucleotides
; FILE REFERENCE: MBH00-831-B (247/276)
; CURRENT APPLICATION NUMBER: US/09/474,432B
; CURRENT FILING DATE: 1999-12-19
; PRIOR APPLICATION NUMBER: US 60/064,866
; PRIOR FILING DATE: 1997-11-05
; PRIOR APPLICATION NUMBER: US 60/084,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: US 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: US 09/301,511
; PRIOR FILING DATE: 1999-04-28
; NUMBER OF SEQ ID NOS: 1526
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 127
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-474-432B-127

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 66.7%; Pred. No. 15;
Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 26 GCTTCGCTCACT 37
||: |||: |||:
Db 2 GCUGCGCUCACU 13

RESULT 45

US-09-474-432B-185/c
; Sequence 185, Application US/09474432B
; Patent No. 6528640
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Burgin, Alex
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka
; APPLICANT: Sweedler, David
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide triphosphate and their incorporation into oligonucleotides
; FILE REFERENCE: MBH00-831-B (247/276)
; CURRENT APPLICATION NUMBER: US/09/474,432B
; CURRENT FILING DATE: 1999-12-19
; PRIOR APPLICATION NUMBER: US 60/064,866
; PRIOR FILING DATE: 1997-11-05
; PRIOR APPLICATION NUMBER: US 60/084,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: US 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: US 09/301,511
; PRIOR FILING DATE: 1999-04-28
; NUMBER OF SEQ ID NOS: 1526
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 185
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-474-432B-185

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 15;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 51 AGCCGCGCCCTT 62
||||| |||||
Db 13 AGCCAGCCCTT 2

RESULT 46

US-09-476-387-127
; Sequence 127, Application US/09476387
; Patent No. 6617438
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleotides
; FILE REFERENCE: MBH00-831-C (249/073)
; CURRENT APPLICATION NUMBER: US/09/476,387
; CURRENT FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29
; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/064,866
; PRIOR FILING DATE: 1997-11-05
; NUMBER OF SEQ ID NOS: 1524
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 127
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-476-387-127

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 66.7%; Pred. No. 15;
Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 26 GCTTCGCTCACT 37
||: |||: |||:
Db 2 GCUGCGCUCACU 13

RESULT 47

US-09-476-387-185/c
; Sequence 185, Application US/09476387
; Patent No. 6617438
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleotides
; FILE REFERENCE: MBH00-831-C (249/073)
; CURRENT APPLICATION NUMBER: US/09/476,387
; CURRENT FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29
; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/064,866
; PRIOR FILING DATE: 1997-11-05
; NUMBER OF SEQ ID NOS: 1524
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 185

```
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-476-387-185

Query Match      13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 15;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 51 AGCCGGCCCCCTT 62
Db 13 AGCCAGCCCCCTT 2

RESULT 48
US-08-180-470-32
; Sequence 32, Application US/08180470
; Patent No. 6045994
; GENERAL INFORMATION:
; APPLICANT: ZABEAU, Marc
; TITLE OF INVENTION: SELECTIVE RESTRICTION FRAGMENT
; NUMBER OF SEQUENCES: 90
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Burns, Doane, Swecker & Mathis
; STREET: The George Mason Bldg., Washington & Prince
; CITY: Alexandria
; STATE: Virginia
; COUNTRY: United States
; ZIP: 22313-1404
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/180,470
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/950,011
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Crane-Feury, Sharon E
; REGISTRATION NUMBER: 36,113
; REFERENCE/DOCKET NUMBER: 010830-031
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 836-6620
; TELEFAX: (703) 836-2021
; INFORMATION FOR SEQ ID NO: 60:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-180-470-60

Query Match      12.7%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 27;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 35 ACTCGGACCGGC 47
Db 2 ACTCAGACTGCG 14

RESULT 50
US-09-068-860-36
; Sequence 36, Application US/09068860
; Patent No. 6261770
; GENERAL INFORMATION:
; APPLICANT: WARTHOE, Peter R.
; TITLE OF INVENTION: METHOD TO CLONE MRNAS
; FILE REFERENCE: 674513-2001.1
; CURRENT APPLICATION NUMBER: US/09/068,860
; CURRENT FILING DATE: 1998-05-17
; EARLIER APPLICATION NUMBER: PCT/DK98/00186
; EARLIER FILING DATE: 1998-05-13
; EARLIER APPLICATION NUMBER: 0547/97
; EARLIER FILING DATE: 1997-05-13
; EARLIER APPLICATION NUMBER: 0432/98
; EARLIER FILING DATE: 1998-03-27
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 36
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Thermophilic eubacteria
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US-09-068-860-36
Query Match      12.7%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 27;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 35 ACTCGGACCGGC 47
Db 2 ACTCAGGACTGC 14

RESULT 51
US-08-730-635-6
; Sequence 6, Application US/08730635
; Patent No. 6514693
; GENERAL INFORMATION:
; APPLICANT: Lansdorp, Peter
; TITLE OF INVENTION: Method for Detecting Multiple Copies of
; TITLE OF INVENTION: a Repeat Sequence in a Nucleic Acid Molecule
; Patent No. 6514693
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HOWSON & HOWSON
; STREET: 321 No. 6514693ristown Road
; CITY: Spring House
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19477
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/730,635
; FILING DATE: 11-OCT-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bak, Mary E.
; REGISTRATION NUMBER: 31,215
; REFERENCE/DOCKET NUMBER: B&P7USA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 540-9200
; TELEFAX: (215) 540-5818
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-730-635-10

Query Match      12.7%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 27;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAC 70
Db 14 CCCTTAACCTAAC 2

RESULT 53
US-08-411-795B-29
; Sequence 29, Application US/08411795B
; Patent No. 560416
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Bradford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mair H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olins, Peter O.
; APPLICANT: Paik, Kumnan
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; TITLE OF INVENTION: Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
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; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/411,795B
 ; FILING DATE: 04-JUN-1995
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/981,044
 ; FILING DATE: 24-NOV-1992
 ; APPLICATION NUMBER: PCT/US93/11197
 ; FILING DATE: 22-NOV-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bennett, Dennis A.
 ; REGISTRATION NUMBER: 34,547
 ; REFERENCE/DOCKET NUMBER: C2713/2
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (708)470-6501
 ; TELEFAX: (708)470-6881
 ; INFORMATION FOR SEQ ID NO: 29:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 16 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (synthetic)
 ; US-08-411-795B-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
 Best Local Similarity 75.0%; Pred. No. 44;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 61 TTAACCAACGTTAGG 76
 DB 1 TGAACCATATGTCAGG 16

RESULT 54
 US-08-411-795B-168
 ; Sequence 168, Application US/08411795B
 ; Patent No..5604116
 ; GENERAL INFORMATION:
 ; APPLICANT: Abrams, Mark A.
 ; APPLICANT: Bauer, S. C.
 ; APPLICANT: Braford-Goldberg, Sarah R.
 ; APPLICANT: Caparon, Mair H.
 ; APPLICANT: Easton, Alan M.
 ; APPLICANT: Klein, Barbara K.
 ; APPLICANT: McKearn, John P.
 ; APPLICANT: Olin, Peter O.
 ; APPLICANT: Paik, Kuman
 ; APPLICANT: Thomas, John W.
 ; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
 ; NUMBER OF SEQUENCES: 415
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
 ; ADDRESSEE: Corporate Patent Dept.
 ; STREET: P. O. Box 5110
 ; CITY: Chicago
 ; STATE: Illinois
 ; COUNTRY: USA
 ; ZIP: 60680
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/411,795B
 ; FILING DATE: 04-JUN-1995
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/981,044
 ; FILING DATE: 24-NOV-1992

; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US93/11197
 ; FILING DATE: 22-NOV-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bennett, Dennis A.
 ; REGISTRATION NUMBER: 34,547
 ; REFERENCE/DOCKET NUMBER: C2713/2
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (708)470-6501
 ; TELEFAX: (708)470-6881
 ; INFORMATION FOR SEQ ID NO: 168:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 16 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (synthetic)
 ; US-08-411-795B-168
 Query Match 12.5%; Score 9.6; DB 1; Length 16;
 Best Local Similarity 75.0%; Pred. No. 44;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 61 TTAACCAACGTTAGG 76
 DB 1 TGAACCATATGTCAGG 16
 RESULT 55
 US-08-411-796-29
 ; Sequence 29, Application US/08411796
 ; Patent No. 5677149
 ; GENERAL INFORMATION:
 ; APPLICANT: Abrams, Mark A.
 ; APPLICANT: Bauer, S. C.
 ; APPLICANT: Braford-Goldberg, Sarah R.
 ; APPLICANT: Caparon, Mair H.
 ; APPLICANT: Easton, Alan M.
 ; APPLICANT: Klein, Barbara K.
 ; APPLICANT: McKearn, John P.
 ; APPLICANT: Olin, Peter O.
 ; APPLICANT: Paik, Kuman
 ; APPLICANT: Polazzi, Joseph O.
 ; APPLICANT: Thomas, John W.
 ; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
 ; NUMBER OF SEQUENCES: 549
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
 ; ADDRESSEE: Corporate Patent Dept.
 ; STREET: P. O. Box 5110
 ; CITY: Chicago
 ; STATE: Illinois
 ; COUNTRY: USA
 ; ZIP: 60680
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/411,796
 ; FILING DATE:
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/981044
 ; FILING DATE: 24-NOV-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US93/11198
 ; FILING DATE: 22-NOV-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bennett, Dennis A.
 ; REGISTRATION NUMBER: 34,547
 ; REFERENCE/DOCKET NUMBER: C2713/1

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;

Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 61 TTAACCAACGTTAGG 76
| | | | | | | | | |
Db 1 TGAACCATATGTCAGG 16

RESULT 58

US-08-471-039-29
; Sequence 29, Application US/08471039
; Patent No. 6017523
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Alan M.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olin, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Polazzi, Joseph O.
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESS: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/471,039
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER: US 07/981,044
FILING DATE: 24-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11198
FILING DATE: 22-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bennett, Dennis A.
REGISTRATION NUMBER: 34,547
REFERENCE/DOCKET NUMBER: C2713/5
TELEPHONE: (708)470-6501
TELEFAX: (708)470-6881
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)

US-08-471-039-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 61 TTAACCAACGTTAGG 76
| | | | | | | | | |
Db 1 TGAACCATATGTCAGG 16

RESULT 59

US-08-764-114-29
; Sequence 29, Application US/08764114
; Patent No. 6440407
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mairé H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olin, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Methods of Ex-vivo Expansion of
; Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple
; TITLE OF INVENTION: Mutation Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESS: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/764,114
FILING DATE: 09-DEC-1996
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/981,044
FILING DATE: 24-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11197
FILING DATE: 22-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/411,795
FILING DATE: 04-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Bennett, Dennis A.
REGISTRATION NUMBER: 34,547
REFERENCE/DOCKET NUMBER: C2713/10
TELEPHONE: (708)470-6501
TELEFAX: (708)470-6881
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)

US-08-764-114-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 61 TTAACCAACGTTAGG 76
| | | | | | | | | |
Db 1 TGAACCATATGTCAGG 16

RESULT 60

US-08-764-114-168
; Sequence 168, Application US/08764114

; Patent No. 6440407
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; APPLICANT: Bauer, S. C.
; APPLICANT: Braford-Goldberg, Sarah R.
; APPLICANT: Caparon, Mairé H.
; APPLICANT: Easton, Alan M.
; APPLICANT: Klein, Barbara K.
; APPLICANT: McKearn, John P.
; APPLICANT: Olines, Peter O.
; APPLICANT: Paik, Kuman
; APPLICANT: Thomas, John W.
; TITLE OF INVENTION: Methods of Ex-vivo Expansion of
; Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple
; TITLE OF INVENTION: Mutation Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/764,114
; FILING DATE: 09-DEC-1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981,044
; FILING DATE: 24-NOV-1992
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: 04-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; US-08-764-114-168

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAACGTTAGG 76
Db 1 TGAACCATATGTCAGG 16

RESULT 61
US-08-469-419-29
; Sequence 29, Application US/08469419
; Patent No. 6458931
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olines, Peter O.

; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olines, Peter O.
; Paik, Kuman
; Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; ADDRESSEE: Corporate Patent Dept.
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,419
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/411,795
; FILING DATE: <Unknown>
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:
; US-08-469-419-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAACGTTAGG 76
Db 1 TGAACCATATGTCAGG 16

RESULT 62
US-08-469-419-168
; Sequence 168, Application US/08469419
; Patent No. 6458931
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olines, Peter O.

Paik, Kuman
Thomas, John W.
TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
Polypeptides
NUMBER OF SEQUENCES: 415
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
STREET: P. O. Box 5110
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60680
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/559,390
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/411,796
FILING DATE:
APPLICATION NUMBER: US 07/981044
FILING DATE: 24-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11198
FILING DATE: 22-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bennett, Dennis A.
REGISTRATION NUMBER: 34,547
REFERENCE/DOCKET NUMBER: C2713/1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (708)470-6501
TELEFAX: (708)470-6881
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)
US-08-559-390-29
Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 61 TTAACCAACGTTAGG 76
Db 1 TGAACCATATGTCAGG 16
RESULT 64
PCT-US93-11198-29
Sequence 29, Application PC/TUS9311198
GENERAL INFORMATION:
APPLICANT: Abrams, Mark A.
APPLICANT: Bauer, S. C.
APPLICANT: Braford-Goldberg, Sarah R.
APPLICANT: Caparon, Mair H.
APPLICANT: Easton, Alan M.
APPLICANT: Klein, Barbara K.
APPLICANT: McKearn, John P.
APPLICANT: Olines, Peter O.
APPLICANT: Paik, Kuman
APPLICANT: Polazzi, Joseph O.
TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
NUMBER OF SEQUENCES: 549
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
STREET: P. O. Box 5110
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60680

Paik, Kuman
Thomas, John W.
TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
Polypeptides
NUMBER OF SEQUENCES: 415
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
STREET: P. O. Box 5110
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60680
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,419
FILING DATE: 06-Jun-1995
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/411,795
FILING DATE: <Unknown>
APPLICATION NUMBER: PCT/US93/11197
FILING DATE: 22-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bennett, Dennis A.
REGISTRATION NUMBER: 34,547
REFERENCE/DOCKET NUMBER: C2713/2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (708)470-6501
TELEFAX: (708)470-6881
INFORMATION FOR SEQ ID NO: 168:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)
SEQUENCE DESCRIPTION: SEQ ID NO: 168:
US-08-469-419-168
Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 61 TTAACCAACGTTAGG 76
Db 1 TGAACCATATGTCAGG 16
RESULT 63
US-08-559-390-29
Sequence 29, Application US/08559390
Patent No. 6479261
GENERAL INFORMATION:
APPLICANT: Abrams, Mark A.
APPLICANT: Bauer, S. C.
APPLICANT: Braford-Goldberg, Sarah R.
APPLICANT: Caparon, Mair H.
APPLICANT: Easton, Alan M.
APPLICANT: Klein, Barbara K.
APPLICANT: McKearn, John P.
APPLICANT: Olines, Peter O.
APPLICANT: Paik, Kuman
APPLICANT: Polazzi, Joseph O.
TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
NUMBER OF SEQUENCES: 549
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,

```
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/111198
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
PCT-US93-11198-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAAACTTAGG 76
Db 1 TGAACCATATGTCAGG 16

RESULT 65
US-09-249-155A-245
; Sequence 245, Application US/09249155A
; Patent No. 6538173
; GENERAL INFORMATION:
; APPLICANT: Heber-Katz, Ellen
; TITLE OF INVENTION: Compositions and Methods for Wound
; FILE REFERENCE: 00486.78503
; CURRENT APPLICATION NUMBER: US/09/249,155A
; CURRENT FILING DATE: 1999-02-12
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-08-26
; PRIOR FILING DATE: 1998-09-28
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 245
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-249-155A-245

Query Match 12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 15;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 8 AACTGGTTCAA 18
Db 1 AACAGGTTCAA 11

RESULT 66
US-09-281-418-129/c
```

```
; Sequence 129, Application US/09281418
; Patent No. 6287769
; GENERAL INFORMATION:
; APPLICANT: Inoue, Takakazu
; TITLE OF INVENTION: Method of Amplifying DNA Fragment, Apparatus for Amplifying DNA F
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/111198
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
PCT-US93-11198-29

Query Match 12.2%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 20;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 10 CTGGTTCAAGT 20
Db 12 CTGGTTGAAGT 2

RESULT 67
US-08-258-553-3/c
; Sequence 3, Application US/08258553
; Patent No. 5567585
; GENERAL INFORMATION:
; APPLICANT: Caetano-Anolles, Gustavo
; APPLICANT: Bassam, Brant J.
; APPLICANT: Gresshoff, Peter M.
; TITLE OF INVENTION: METHOD AND KIT FOR SILVER STAINING,
; FILE REFERENCE: 00486.78503
; CURRENT APPLICATION NUMBER: US/08/258,553
; CURRENT FILING DATE: 1999-02-12
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-08-26
; PRIOR FILING DATE: 1998-09-28
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 245
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-249-155A-245

Query Match 12.2%; Score 9.4; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 44;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAAACTTAGG 76
Db 1 TGAACCATATGTCAGG 16

RESULT 65
US-09-249-155A-245
; Sequence 245, Application US/09249155A
; Patent No. 6538173
; GENERAL INFORMATION:
; APPLICANT: Heber-Katz, Ellen
; TITLE OF INVENTION: Compositions and Methods for Wound
; FILE REFERENCE: 00486.78503
; CURRENT APPLICATION NUMBER: US/09/249,155A
; CURRENT FILING DATE: 1999-02-12
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-08-26
; PRIOR FILING DATE: 1998-09-28
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 245
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-249-155A-245

Query Match 12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 15;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 8 AACTGGTTCAA 18
Db 1 AACAGGTTCAA 11

RESULT 66
US-09-281-418-129/c
```

```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-258-553-3

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 22 GTTCGCTTCGC 32
Db 11 GCTCGCTTCGC 1

RESULT 68
US-08-489-269-5/c
; Sequence 5, Application US/08489269
; Patent No. 5962221
; GENERAL INFORMATION:
; APPLICANT: Caetano-Anolles, Gustavo
; TITLE OF INVENTION: OLIGONUCLEOTIDE CONSTRUCTS AND METHODS
; TITLE OF INVENTION: FOR THE GENERATION OF SEQUENCE SIGNATURES FROM NUCLEIC
; ACIDS
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: WEISER & ASSOCIATES
; STREET: 230 South Fifteenth Street, Suite 500
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19102
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 09-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weiser, Gerard J.
; REGISTRATION NUMBER: 19,763
; REFERENCE/DOCKET NUMBER: 372.6176P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-875-8383
; TELEFAX: 215-875-8394
; INFORMATION FOR SEQ ID NO: 5:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-489-269-5

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 22 GTTCGCTTCGC 32
Db 11 GCTCGCTTCGC 1

RESULT 69
US-08-139-459-2/c
; Sequence 2, Application US/08139459
; Patent No. 6074818
; GENERAL INFORMATION:
; APPLICANT: Caetano-Anolles, Gustavo

```

```

; APPLICANT: Bassam, Brant
; APPLICANT: Gresshoff, Peter
; TITLE OF INVENTION: Fingerprinting of Nucleic Acids,
; TITLE OF INVENTION: Products and Methods
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Weiser & Associates
; STREET: 230 South Fifteenth Street, Suite 500
; CITY: Philadelphia
; STATE: Pennsylvania
; COUNTRY: U.S.A.
; ZIP: 19102
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE: 20-OCT-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weiser, Gerard J.
; REGISTRATION NUMBER: 19,763
; REFERENCE/DOCKET NUMBER: 377.5946P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-875-8383
; TELEFAX: 215-875-8394
; TELEX: 834809 WEISTAK
; INFORMATION FOR SEQ ID NO: 2:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-139-459-2

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 22 GTTCGCTTCGC 32
Db 11 GCTCGCTTCGC 1

RESULT 70
US-09-216-584-31
; Sequence 31, Application US/09216584
; Patent No. 6548657
; GENERAL INFORMATION:
; APPLICANT: Alex. Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MHB00-853-A; RPI 237/167
; CURRENT APPLICATION NUMBER: US/09/216,584
; CURRENT FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 31
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within UPA transcript

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US-09-216-584-31

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 45 GGCTAAAGCCG 55
| | | | | | | | | |
Db 3 GCCTAAAGCCG 13

RESULT 71

US-09-914-259-132
; Sequence 132, Application US/09914259
; Patent No. 6495336
; GENERAL INFORMATION:
; APPLICANT: Makowski, Lee
; APPLICANT: Hyman, Paul
; APPLICANT: Williams, Mark
; TITLE OF INVENTION: STAGED ASSEMBLY OF NANOSTRUCTURES
; FILE REFERENCE: 8471-010-999
; CURRENT APPLICATION NUMBER: US/09/914,259
; CURRENT FILING DATE: 2000-11-21
; NUMBER OF SEQ ID NOS: 180
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 132
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Theoretical sequence designed to show proper and improper joining
; OTHER INFORMATION: elements
US-09-914-259-132

Query Match 11.7%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 GGTTCAGT 20
| | | | | | | | | |
Db 1 GGTTCAGT 9

RESULT 72

US-08-894-784-3/c
; Sequence 3, Application US/08894784
; Patent No. 6005095
; GENERAL INFORMATION:
; APPLICANT: Capaccioli, Sergio
; APPLICANT: Morelli, Susanna
; APPLICANT: Nicolin, Angelo
; TITLE OF INVENTION: ANTISENSE TRANSCRIPT ASSOCIATED TO TUMOR
; TITLE OF INVENTION: CELLS HAVING A T(14;18) TRANSLOCATION AND
; TITLE OF INVENTION: OLIGODEOXYNUCLEOTIDES USEFUL IN THE DIAGNOSIS AND
; TITLE OF INVENTION: TREATMENT OF SAID TUMOR CELLS
; NUMBER OF SEQUENCES: 49
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT &
; ADDRESSEE: DUNNER, LLP
; STREET: 1300 I Street, NW
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/894,784
; FILING DATE: 15-DEC-1997
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: PCT/EP96/00852
; FILING DATE: 02-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: IL MI95 A 000420
; FILING DATE: 03-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul, John C.
; REGISTRATION NUMBER: 30,413
; REFERENCE/DOCKET NUMBER: 05999.0005-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-894-784-3

Query Match 11.7%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 TCACTCGGG 41
| | | | | | | | | |
Db 9 TCACTCGGG 1

RESULT 73

US-08-544-381B-207
; Sequence 207, Application US/08544381B
; Patent No. 6027880
; GENERAL INFORMATION:
; APPLICANT: Cronin, Maureen T.
; APPLICANT: Miyada, Charles Garrett
; APPLICANT: Hubbell, Earl A.
; APPLICANT: Chee, Mark
; APPLICANT: Fodor, Stephen P.A.
; APPLICANT: Huang, Xiaohua C.
; APPLICANT: Lipshutz, Robert J.
; APPLICANT: Lobban, Peter E.
; APPLICANT: Morris, Macdonald S.
; APPLICANT: Sheldon, Edward L.
; TITLE OF INVENTION: Arrays of Nucleic Acid Probes for
; TITLE OF INVENTION: Detecting Cystic Fibrosis
; NUMBER OF SEQUENCES: 250
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/544,381B
; FILING DATE: 10-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,521
; FILING DATE: 02-AUG-1995
; PRIOR APPLICATION DATA: PCT/US94/12305
; APPLICATION NUMBER: PCT/US94/12305
; FILING DATE: 26-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/284,064
; FILING DATE: 02-AUG-1994

;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 08/143,312
;; FILING DATE: 26-OCT-1993
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Liebeschuetz, Joe
;; REGISTRATION NUMBER: 37,505
;; REFERENCE/DOCKET NUMBER: 018547-004130US
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 415-576-0200
;; TELEFAX: 415-576-0300
;; INFORMATION FOR SEQ ID NO: 207:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 11 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (oligonucleotide)
;; US-08-544-381B-207

Query Match 11.7%; Score 9; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 18;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 55 GGCCCTTAA 64
Db 2 GGCCCTTAA 11

RESULT 74
US-08-778-794A-18
; Sequence 18, Application US/08778794A
; Patent No. 6309823
; GENERAL INFORMATION:
; APPLICANT: Cronin, Maureen T.
; APPLICANT: Miyada, Charles Garrett
; APPLICANT: Hubbell, Earl A.
; APPLICANT: Chee, Mark
; APPLICANT: Fodor, Stephen P.A.
; APPLICANT: Huang, Xiaohua C.
; APPLICANT: Lipshutz, Robert J.
; APPLICANT: Lobban, Peter E.
; APPLICANT: Morris, MacDonald S.
; APPLICANT: Sheldon, Edward L.
; TITLE OF INVENTION: for Analyzing Biotransformation Genes
; NUMBER OF SEQUENCES: 156
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/778,794A
; FILING DATE: 03-JAN-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/143,312
; FILING DATE: 26-OCT-1993
; APPLICATION NUMBER: US 08/284,064
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: WO PCT/US94/12305
; FILING DATE: 26-OCT-1994
; APPLICATION NUMBER: US 08/510,521
; FILING DATE: 02-AUG-1995
; APPLICATION NUMBER: US 08/544,381
; FILING DATE: 10-OCT-1995

;; ATTORNEY/AGENT INFORMATION:
;; NAME: Liebeschuetz, Joe
;; REGISTRATION NUMBER: 37,505
;; REFERENCE/DOCKET NUMBER: 018547-015700US
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (415) 576-0200
;; TELEFAX: (415) 576-0200
;; TELEX:
;; INFORMATION FOR SEQ ID NO: 18:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 11 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA
;; US-08-778-794A-18

Query Match 11.7%; Score 9; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 18;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 55 GGCCCTTAA 64
Db 2 GGCCCTTAA 11

RESULT 75
US-09-341-399-18
; Sequence 18, Application US/09341399
; Patent No. 6468744
; GENERAL INFORMATION:
; APPLICANT: Cronin, Maureen T.
; APPLICANT: Sheldon, Edward L.
; APPLICANT: Miyada, Charles G.
; APPLICANT: Hubbell, Earl A.
; APPLICANT: Chee, Mark
; APPLICANT: Fodor, Stephen P.A.
; APPLICANT: Huang, Xiaohua C.
; APPLICANT: Lipshutz, Robert J.
; APPLICANT: Lobban, Peter E.
; APPLICANT: Morris, MacDonald S.
; TITLE OF INVENTION: Analysis of Genetic Polymorphisms and
; NUMBER OF SEQUENCES: 51
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/341,399
; FILING DATE: 17-NO. 6468744-1999
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/143,312
; FILING DATE: 26-OCT-1993
; APPLICATION NUMBER: US 08/284,064
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: WO PCT/US94/12305
; FILING DATE: 26-OCT-1994
; APPLICATION NUMBER: US 08/510,521
; FILING DATE: 02-AUG-1995
; APPLICATION NUMBER: US 08/544,381
; FILING DATE: 10-OCT-1995
; APPLICATION NUMBER: US 08/778,794
; FILING DATE: 03-JAN-1997

US-09-04

REFERENCE/DOCKET NUMBER: HKI-005
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: YES
US-08-388-171-7

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 53 CGGGCCCTTAA 64
Db 12 CGGGCGACTTAA 1

RESULT 79

US-08-441-887A-205/c
Sequence 205, Application US/08441887A
Patent No. 5837832

GENERAL INFORMATION:
APPLICANT: Chee, Mark
APPLICANT: Cronin, Maureen T.
APPLICANT: Fodor, Stephen P.A.
APPLICANT: Huang, Xiaohua X.
APPLICANT: Hubbell, Earl A.
APPLICANT: Lipshutz, Robert J.
APPLICANT: Lobban, Peter E.
APPLICANT: Morris, Macdonald S.
APPLICANT: Sheldon, Edward L.
TITLE OF INVENTION: Arrays of Nucleic Acid Probes on
NUMBER OF SEQUENCES: 360
TITLE OF INVENTION: Biological Chips
NUMBER OF SEQUENCES: 360
CORRESPONDENCE ADDRESS:
ADDRESS: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/441,887A
FILING DATE: 16-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/143,312
FILING DATE: 26-OCT-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/082,937
FILING DATE: 25-JUN-1993

ATTORNEY/AGENT INFORMATION:
NAME: Liebeschuetz, Joseph O.
REGISTRATION NUMBER: 37,505
REFERENCE/DOCKET NUMBER: 018547-004160US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-326-2400
TELEFAX: 650-326-2422
INFORMATION FOR SEQ ID NO: 205:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (probe)
US-08-441-887A-205

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 56 GCCCCTTAACCA 67
Db 12 GTCCCTTGACCA 1

RESULT 80

US-08-454-527-7/c
Sequence 7, Application US/08454527
Patent No. 5851765

GENERAL INFORMATION:
APPLICANT: KVSTER, HERBERT
TITLE OF INVENTION: DNA SEQUENCING BY MASS SPECTROMETRY VIA
TITLE OF INVENTION: EXONUCLEASE DEGRADATION
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESS: LAHIVE & COCKFIELD
STREET: 60 STATE STREET, suite 510
CITY: BOSTON
STATE: MASSACHUSETTS
COUNTRY: USA
ZIP: 02109

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/454,527
FILING DATE: 30-MAY-1995

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/388,171
FILING DATE: 10-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/034,738
FILING DATE: 19-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Deconti, Giulio A.

REGISTRATION NUMBER: 31,503
REFERENCE/DOCKET NUMBER: SQI-005CND1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: YES

US-08-454-527-7

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 53 CGGGCCCTTAA 64
Db 12 CGGGCGACTTAA 1

RESULT 81

US-08-173-489C-252

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; Sequence 252, Application US/08173489C
; Patent No. 5861244
; GENERAL INFORMATION:
; APPLICANT: WANG, C.-G.
; APPLICANT: HEPBURN, A. G.
; TITLE OF INVENTION: GENETIC SEQUENCE ASSAY USING DNA
; TITLE OF INVENTION: TRIPLE-STRAND FORMATION.
; NUMBER OF SEQUENCES: 365
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PROFILE DIAGNOSTIC SCIENCES, INC.,
; STREET: 510 EAST 73RD STREET,
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10021.
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44Mb storage
; COMPUTER: IBM PC/XT/AT
; OPERATING SYSTEM: MS-DOS version 6.2
; SOFTWARE: Wordperfect Version 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/173,489C
; FILING DATE: 22 DEC 1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/968,436
; FILING DATE: 29 OCT 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Handelman, Joseph H.
; REGISTRATION NUMBER: 26,179
; REFERENCE/DOCKET NUMBER: U9518-6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (attorney) (212) 708-1880
; TELEFAX: (attorney) (212) 246-8959
; INFORMATION FOR SEQ ID NO: 252:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 bases
; TYPE: nucleic acid
; STRANDEDNESS: single stranded
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: third strand derived from M. luteus
; DESCRIPTION: 238 region in Seq ID No. 5861244251
; HYPOTHETICAL: yes
; ANTI-SENSE: no
; PUBLICATION INFORMATION:
; RELEVANT RESIDUES IN SEQ ID NO: 252 :FROM 1 TO 12
; US-08-173-489C-252

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 25 CGCTTCGCTCAC 36
Db 1 CCCTTCGCTCTC 12

RESULT 82
US-08-880-829-3/c
; Sequence 3, Application US/08880829
; Patent No. 5925559
; GENERAL INFORMATION:
; APPLICANT: Collins, John
; APPLICANT: Roettgen, Peter
; TITLE OF INVENTION: A Collection of Phagemids, A
; TITLE OF INVENTION: Collection of Escherichia Coli
; TITLE OF INVENTION: Cells Carrying The Phagemids, A
; TITLE OF INVENTION: Collection of Phagemid Particles
; TITLE OF INVENTION: Produced From Said Collection
; TITLE OF INVENTION: And Phagemid Particles
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:

; Sequence 252, Application US/08173489C
; Patent No. 5861244
; GENERAL INFORMATION:
; APPLICANT: WANG, C.-G.
; APPLICANT: HEPBURN, A. G.
; TITLE OF INVENTION: GENETIC SEQUENCE ASSAY USING DNA
; TITLE OF INVENTION: TRIPLE-STRAND FORMATION.
; NUMBER OF SEQUENCES: 365
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PROFILE DIAGNOSTIC SCIENCES, INC.,
; STREET: 510 EAST 73RD STREET,
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10021.
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44Mb storage
; COMPUTER: IBM PC/XT/AT
; OPERATING SYSTEM: MS-DOS version 6.2
; SOFTWARE: Wordperfect Version 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/173,489C
; FILING DATE: 22 DEC 1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/968,436
; FILING DATE: 29 OCT 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Handelman, Joseph H.
; REGISTRATION NUMBER: 26,179
; REFERENCE/DOCKET NUMBER: U9518-6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (attorney) (212) 708-1880
; TELEFAX: (attorney) (212) 246-8959
; INFORMATION FOR SEQ ID NO: 252:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 bases
; TYPE: nucleic acid
; STRANDEDNESS: single stranded
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: third strand derived from M. luteus
; DESCRIPTION: 238 region in Seq ID No. 5861244251
; HYPOTHETICAL: yes
; ANTI-SENSE: no
; PUBLICATION INFORMATION:
; RELEVANT RESIDUES IN SEQ ID NO: 252 :FROM 1 TO 12
; US-08-173-489C-252

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 25 CGCTTCGCTCAC 36
Db 1 CCCTTCGCTCTC 12

RESULT 83
US-08-771-602D-31/c
; Sequence 31, Application US/08771602D
; Patent No. 5976795
; GENERAL INFORMATION:
; APPLICANT: Voytas, Daniel F.
; APPLICANT: Zou, Sige
; TITLE OF INVENTION: Retrotransposon and Methods
; NUMBER OF SEQUENCES: 51
; CORRESPONDENCE ADDRESS:

```

```

; ADDRESSEE: Joseph T. Eisele
; ADDRESSEE: Kane, Dalseimer, Sullivan, Kurucz,
; ADDRESSEE: Levy, Eisele and Richard
; STREET: 711 Third Avenue
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-4059
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3-1/2" DISKETTE
; COMPUTER: IBM-XT COMPATIBLE
; OPERATING SYSTEM: DOS 3.3:
; SOFTWARE: WORDPERFECT 5.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/880,829
; FILING DATE: 23-JUN-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/458,668
; FILING DATE: 06/02/95
; APPLICATION NUMBER: German EP 94 108 689.4
; FILING DATE: 06/07/94
; ATTORNEY/AGENT INFORMATION:
; NAME: EISELE, JOSEPH T.
; REGISTRATION NUMBER: 25,331
; REFERENCE/DOCKET NUMBER: 2727-77
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 687-6000
; TELEFAX: (212) 682-3485
; TELEX: (212) 426767
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single strand
; TOPOLOGY: linear
; MOLECULE TYPE:
; HYPOTHETICAL:
; ANTI-SENSE:
; FRAGMENT TYPE:
; ORIGINAL SOURCE:
; ORGANISM:
; STRAIN:
; INDIVIDUAL ISOLATE:
; DEVELOPMENTAL STAGE:
; HAPLOTYPE:
; TISSUE TYPE:
; CELL TYPE:
; CELL LINE:
; ORGANELLE:
; IMMEDIATE SOURCE:
; CLONE:
; US-08-880-829-3

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 GTTCAAGTCGTT 24
Db 12 GTTCAGTTCGTT 1

RESULT 83
US-08-771-602D-31/c
; Sequence 31, Application US/08771602D
; Patent No. 5976795
; GENERAL INFORMATION:
; APPLICANT: Voytas, Daniel F.
; APPLICANT: Zou, Sige
; TITLE OF INVENTION: Retrotransposon and Methods
; NUMBER OF SEQUENCES: 51
; CORRESPONDENCE ADDRESS:

```

ADDRESSEE: Greenlee, Winner and Sullivan, P.C.
STREET: 5370 Manhattan Circle, Suite 201
CITY: Boulder
STATE: Colorado
COUNTRY: USA
ZIP: 80303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/771,602D
FILING DATE: 20-DEC-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/010,869
FILING DATE: 31-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ferber, Donna M.
REGISTRATION NUMBER: 33,878
REFERENCE/DOCKET NUMBER: 8-96
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 499-8080
TELEFAX: (303) 499-8089
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: not relevant
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
US-08-771-602D-31

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0;

Qy 55 GGGCCCTTAACC 66
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Db 12 GGGCCCATTAACC 1

RESULT 84
US-08-779-355-19/c
Sequence 19, Application US/08/779355
Patent No. 6017701
GENERAL INFORMATION:
APPLICANT: Sorge, Joseph A.
TITLE OF INVENTION: METHODS AND ADAPTORS FOR GENERATING
TITLE OF INVENTION: SPECIFIC NUCLEIC ACID POPULATIONS
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
STREET: 1200 G Street N.W., Suite 700
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/779,355
FILING DATE: 06-JAN-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/775,993
FILING DATE: 03-JAN-1997

ATTORNEY/AGENT INFORMATION:
NAME: Kulik, David J.
REGISTRATION NUMBER: 36,576
REFERENCE/DOCKET NUMBER: 43092CP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)628-8800
TELEFAX: (202)628-8844
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-779-355-19

Query Match 11.4%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 2; Indels 0;

Qy 23 TTCGCTTCGCTC 34
||| ||| ||| ||| |||
Db 12 TTCCTTCGCAC 1

RESULT 85
US-08-938-835A-19/c
Sequence 19, Application US/08938835A
Patent No. 6060245
GENERAL INFORMATION:
APPLICANT: SORGE, Joseph A.
APPLICANT: MULLINAX, Rebecca L.
TITLE OF INVENTION: METHODS AND ADAPTORS FOR GENERATING
TITLE OF INVENTION: SPECIFIC NUCLEIC ACID POPULATIONS
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner, L.L.P.
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/938,835A
FILING DATE: 26-SEPT-1997
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/775,993
FILING DATE: 03-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/779,335
FILING DATE: 06-JAN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Barker, M. Paul
REGISTRATION NUMBER: 32,013
REFERENCE/DOCKET NUMBER: 04121.0044-02000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-938-835A-19

Query Match 11.4%; Score 8.8; DB 1; Length 12;
 Best Local Similarity 83.3%; Pred. No. 27;
 Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 23 TTGCTTCGCTC 34
 ||| |||||
 Db 12 TTCTTCGCAC 1

RESULT 86
 5523089-35
 ; Patent No. 5523089
 ; APPLICANT: BERGSTROM, SVEN; BARBOUR, ALAN G.; MAGNARELLI, LOUIS A.
 ; TITLE OF INVENTION: BORRELIA ANTIGEN
 ; NUMBER OF SEQUENCES: 38
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/79,601
 ; FILING DATE: 22-JUN-1993
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 924,798
 ; FILING DATE: 06-AUG-1992
 ; APPLICATION NUMBER: 422,881
 ; FILING DATE: 18-OCT-1989
 ; SEQ ID NO:35:
 ; LENGTH: 12
 ; 5523089-35

Query Match 11.4%; Score 8.8; DB 1; Length 12;
 Best Local Similarity 83.3%; Pred. No. 27;
 Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 63 AACCAACGTTA 74
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 Db 1 AACCAACTTAA 12

Search completed: October 29, 2004, 12:34:07
 Job time : 1 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: October 29, 2004, 12:35:44 ; Search time 0.001 Seconds
(without alignments)
142.758 Million cell updates/sec

Title: US-09-701-626A-11
Perfect score: 77
Sequence: 1 acctaacactggttaggc.....cccttaaccaaacgtaggc 77

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 59 seqs, 927 residues
Total number of hits satisfying chosen parameters: 118

Minimum DB seq length: 10
Maximum DB seq length: 77

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 64 summaries

Database : rnpb11.seq:*
Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|---------------------|
| 1 | 27.4 | 35.6 | 34 | 1 | US-10-407-637-29 |
| 2 | 13.2 | 17.1 | 18 | 1 | Sequence 29, Appl |
| 3 | 12.8 | 16.6 | 18 | 1 | Sequence 19, Appl |
| 4 | 12.4 | 16.1 | 17 | 1 | Sequence 105, Appl |
| 5 | 12.4 | 16.1 | 17 | 1 | Sequence 1927, Appl |
| 6 | 12.4 | 16.1 | 17 | 1 | Sequence 2628, Appl |
| 7 | 12.4 | 16.1 | 17 | 1 | Sequence 2629, Appl |
| 8 | 12.4 | 16.1 | 17 | 1 | Sequence 2629, Appl |
| 9 | 12.4 | 16.1 | 17 | 1 | Sequence 2629, Appl |
| 10 | 12.4 | 16.1 | 17 | 1 | Sequence 4520, Appl |
| 11 | 12.4 | 16.1 | 17 | 1 | Sequence 5221, Appl |
| 12 | 12.4 | 16.1 | 17 | 1 | Sequence 5222, Appl |
| 13 | 12.2 | 15.8 | 17 | 1 | Sequence 407, Appl |
| 14 | 12.2 | 15.8 | 17 | 1 | Sequence 2048, Appl |
| 15 | 12.2 | 15.8 | 17 | 1 | Sequence 2048, Appl |
| 16 | 12.2 | 15.8 | 17 | 1 | Sequence 3000, Appl |
| 17 | 12.2 | 15.8 | 17 | 1 | Sequence 4641, Appl |
| 18 | 12.2 | 15.8 | 17 | 1 | Sequence 354, Appl |
| 19 | 12.2 | 15.8 | 17 | 1 | Sequence 354, Appl |
| 20 | 12.2 | 15.8 | 17 | 1 | Sequence 1504, Appl |
| 21 | 12.2 | 15.8 | 17 | 1 | Sequence 3051, Appl |
| 22 | 12.2 | 15.8 | 17 | 1 | Sequence 1504, Appl |
| 23 | 12.2 | 15.8 | 17 | 1 | Sequence 3051, Appl |
| 24 | 12.2 | 15.8 | 17 | 1 | Sequence 4097, Appl |
| 25 | 12.2 | 15.8 | 17 | 1 | Sequence 5644, Appl |
| 26 | 12.2 | 15.8 | 17 | 1 | Sequence 4759, Appl |
| 27 | 11.8 | 15.3 | 15 | 1 | Sequence 4759, Appl |
| 28 | 11.8 | 15.3 | 15 | 1 | Sequence 7352, Appl |
| 29 | 11.8 | 15.3 | 15 | 1 | Sequence 9664, Appl |
| 30 | 11.8 | 15.3 | 16 | 1 | Sequence 9664, Appl |
| 31 | 11.8 | 15.3 | 16 | 1 | Sequence 7415, Appl |
| 32 | 11.8 | 15.3 | 16 | 1 | Sequence 7415, Appl |
| 33 | 11.2 | 14.5 | 16 | 1 | Sequence 29, Appl |

| | | | | | | |
|------|------|------|----|---|--------------------|---------------------|
| C 34 | 11.2 | 14.5 | 16 | 1 | US-10-090-182A-168 | Sequence 168, Appl |
| C 35 | 11.2 | 14.5 | 16 | 1 | US-10-078-113-29 | Sequence 29, Appl |
| C 36 | 11.2 | 14.5 | 16 | 1 | US-10-078-113-168 | Sequence 168, Appl |
| C 37 | 11.2 | 14.5 | 16 | 1 | US-10-179-940-29 | Sequence 29, Appl |
| C 38 | 11.2 | 14.5 | 16 | 1 | US-10-674-836-7 | Sequence 7, Appl |
| C 39 | 11 | 14.3 | 15 | 1 | US-09-504-231A-353 | Sequence 353, Appl |
| C 40 | 11 | 14.3 | 15 | 1 | US-09-504-231A-355 | Sequence 355, Appl |
| C 41 | 11 | 14.3 | 15 | 1 | US-09-274-553D-353 | Sequence 353, Appl |
| C 42 | 11 | 14.3 | 15 | 1 | US-09-274-553D-355 | Sequence 355, Appl |
| C 43 | 10.8 | 14.0 | 15 | 1 | US-09-504-231A-441 | Sequence 441, Appl |
| C 44 | 10.8 | 14.0 | 15 | 1 | US-09-274-553D-441 | Sequence 441, Appl |
| C 45 | 10.8 | 14.0 | 15 | 1 | US-09-881-557A-10 | Sequence 10, Appl |
| C 46 | 10.4 | 13.5 | 13 | 1 | US-09-825-805-127 | Sequence 127, Appl |
| C 47 | 10.4 | 13.5 | 13 | 1 | US-09-825-805-185 | Sequence 185, Appl |
| C 48 | 9.8 | 12.7 | 14 | 1 | US-10-132-002-6 | Sequence 6, Appl |
| C 49 | 9.8 | 12.7 | 14 | 1 | US-10-132-002-10 | Sequence 10, Appl |
| C 50 | 9.8 | 12.7 | 14 | 1 | US-10-166-225A-16 | Sequence 16, Appl |
| C 51 | 9.6 | 12.5 | 16 | 1 | US-10-090-182A-29 | Sequence 29, Appl |
| C 52 | 9.6 | 12.5 | 16 | 1 | US-10-090-182A-168 | Sequence 168, Appl |
| C 53 | 9.6 | 12.5 | 16 | 1 | US-10-078-113-29 | Sequence 29, Appl |
| C 54 | 9.6 | 12.5 | 16 | 1 | US-10-078-113-168 | Sequence 168, Appl |
| C 55 | 9.6 | 12.5 | 16 | 1 | US-10-179-940-29 | Sequence 29, Appl |
| C 56 | 9.4 | 12.2 | 11 | 1 | US-09-249-155-245 | Sequence 245, Appl |
| C 57 | 9.4 | 12.2 | 11 | 1 | US-10-314-322-245 | Sequence 245, Appl |
| C 58 | 9.4 | 12.2 | 11 | 1 | US-10-450-797-908 | Sequence 908, Appl |
| C 59 | 9.4 | 12.2 | 11 | 1 | US-10-450-797-1002 | Sequence 1002, Appl |
| C 60 | 9.4 | 12.2 | 12 | 1 | US-10-094-516B-50 | Sequence 50, Appl |
| C 61 | 9.4 | 12.2 | 13 | 1 | US-09-990-102-8 | Sequence 8, Appl |
| C 62 | 9.4 | 12.2 | 13 | 1 | US-10-156-433-31 | Sequence 31, Appl |
| C 63 | 9.4 | 12.2 | 13 | 1 | US-10-112-814-31 | Sequence 31, Appl |
| C 64 | 9.4 | 12.2 | 13 | 1 | US-10-338-587A-16 | Sequence 16, Appl |

ALIGNMENTS

RESULT 1

US-10-407-637-29
; Sequence 29, Application US/10407637
; Publication No. US20030194736A1
; GENERAL INFORMATION:
; APPLICANT: Bitnaitte, Jurate
; TITLE OF INVENTION: Methods And Compositions For DNA Manipulation
; FILE REFERENCE: NEB-203-US
; CURRENT APPLICATION NUMBER: US/10/407,637
; CURRENT FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: US 60/372,352
; PRIOR FILING DATE: 2002-04-12
; PRIOR APPLICATION NUMBER: US 60/372,675
; PRIOR FILING DATE: 2002-04-15
; PRIOR APPLICATION NUMBER: US 60/421,010
; PRIOR FILING DATE: 2002-10-24
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 29
; LENGTH: 34
; TYPE: DNA
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: Synthetic Primer Pal3-3
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: n = 8-oxo-guanine
US-10-407-637-29

Query Match 35.6%; Score 27.4; DB 1; Length 34;
Best Local Similarity 93.3%; Pred. No. 0.1;
Matches 28; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 45 GGCTAAACCGCGCCCTTAAACCAACGTTA 74
Db 5 GNCCTAAAGCCTGCCCTTAAACCAACGTTA 34

```
RESULT 2
US-10-282-174-19
; Sequence 19, Application US/10282174
; Publication No. US20030224380A1
; GENERAL INFORMATION:
; APPLICANT: Becker, Kenneth David
; APPLICANT: Velicelebi, Gonul
; APPLICANT: Elliot, Kathryn J.
; APPLICANT: Wang, Xin
; APPLICANT: Tanzi, Rudolph E.
; APPLICANT: Bertram, Lars
; APPLICANT: Saunders, Aleister J.
; APPLICANT: Mullin, Kristina M.
; APPLICANT: Sampson, Andrew Johnson
; APPLICANT: Blacker, Deborah Lynne
; TITLE OF INVENTION: GENES AND POLYMORPHISMS ON CHROMOSOME 10
; TITLE OF INVENTION: ASSOCIATED WITH ALZHEIMER'S DISEASE AND OTHER
; TITLE OF INVENTION: NEURODEGENERATIVE DISEASES
; FILE REFERENCE: 37481-3308
; CURRENT APPLICATION NUMBER: US/10/282,174
; CURRENT FILING DATE: 2002-10-25
; PRIOR APPLICATION NUMBER: US 60/339,525
; PRIOR FILING DATE: 2001-10-25
; PRIOR APPLICATION NUMBER: US 60/338,010
; PRIOR FILING DATE: 2001-11-08
; PRIOR APPLICATION NUMBER: US 60/336,929
; PRIOR FILING DATE: 2001-11-08
; PRIOR APPLICATION NUMBER: US 60/338,363
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: US 60/337,052
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: US 60/368,919
; PRIOR FILING DATE: 2002-03-28
; NUMBER OF SEQ ID NOS: 564
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Primer
US-10-282-174-19

Query Match      17.1%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 12;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      35  ACTCGGGACCGGCTAAG 52
        ||||| ||||| |||||
Db      1  ACACGGGAGCGGTACAG 18

RESULT 3
US-10-398-308-105/c
; Sequence 105, Application US/10398308
; Publication No. US20040029825A1
; GENERAL INFORMATION:
; APPLICANT: Davies, Christopher J.
; APPLICANT: Schlafer, Donald H.
; APPLICANT: Hill, Jonathan R.
; TITLE OF INVENTION: METHODS OF MINIMIZING IMMUNOLOGICAL REJECTION OF A
; FILE REFERENCE: 19603/3373
; CURRENT APPLICATION NUMBER: US/10/398,308
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: 60/237,673
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: PCT/US01/30925
; PRIOR FILING DATE: 2001-10-03
; NUMBER OF SEQ ID NOS: 145
; SOFTWARE: PatentIn Ver. 2.1
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; SEQ ID NO 105
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: BoLA Class I,
; OTHER INFORMATION: Exon 3, Series A Probe
US-10-398-308-105

Query Match      16.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 14;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      12  GGTTCAAGTCGTTGCG 27
        ||||| ||||| |||||
Db      17  GGTTCAAGCAGTTGCG 2

RESULT 4
US-09-740-332-1927/c
; Sequence 1927, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1927
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-1927

Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 15;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      56  GCCCCTTAACCAAA 69
        ||||| ||||| |||||
Db      15  GCCCCTAACCAAA 2

RESULT 5
US-09-740-332-2628
; Sequence 2628, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2628
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2628
```



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Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      56 GCCCCTTAACCAAA 69
Db      4 GCCCAUAACCAAA 17

RESULT 6
US-09-740-332-2629
; Sequence 2629, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2629
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2629

Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      56 GCCCCTTAACCAAA 69
Db      1 GCCCAUAACCAAA 14

RESULT 7
US-09-817-879-1927/c
; Sequence 1927, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1927
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-1927

Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 15;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      56 GCCCCTTAACCAAA 69
Db      15 GCCCATAACCAAA 2
```

```
RESULT 8
US-09-817-879-2628
; Sequence 2628, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2628
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-2628

Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      56 GCCCCTTAACCAAA 69
Db      4 GCCCAUAACCAAA 17

RESULT 9
US-09-817-879-2629
; Sequence 2629, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2629
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-2629

Query Match      16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      56 GCCCCTTAACCAAA 69
Db      1 GCCCAUAACCAAA 14

RESULT 10
US-10-669-841-4520/c
; Sequence 4520, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
```

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; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; TITLE OF INVENTION: VIRUS REPLICATION
; FILE REFERENCE: 400/042US (MHH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4520
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-4520
;
Query Match 16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 15;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCAA 69
Db 15 GCCCATAACCAA 2
|||||:|||||

RESULT 11
US-10-669-841-5221
; Sequence 5221, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MHH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
```

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; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5221
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-5221
;
Query Match 16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCAA 69
Db 4 GCCCAUAACCAA 17
|||||:|||||

RESULT 12
US-10-669-841-5222
; Sequence 5222, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MHH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
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; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5222
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-5222

Query Match          16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 56 GCCCCTTAACCAA 69
DB 1 GCCCAACCAA 14

RESULT 13
US-09-740-332-407
; Sequence 407, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 407
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-407

Query Match          15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 16;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 10 CTGGTTCAAGTCGTTCC 26
DB 1 CAGGUUCAACUCGUCG 17

RESULT 14
US-09-740-332-2048/c
; Sequence 2048, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 407
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-407

Query Match          15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 16;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 10 CTGGTTCAAGTCGTTCC 26
DB 1 CAGGUUCAACUCGUCG 17

RESULT 15
US-09-817-879-407
; Sequence 407, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 407
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-407

Query Match          15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 16;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 10 CTGGTTCAAGTCGTTCC 26
DB 1 CAGGUUCAACUCGUCG 17

RESULT 16
US-09-817-879-2048/c
; Sequence 2048, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2048
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2048
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```

; TITLE OF INVENTION: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2048
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2048

Query Match          15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 16;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 30 CGCTCACTCGGACCGG 46
DB 17 CGCTCGCGGACCGG 1

RESULT 15
US-09-817-879-407
; Sequence 407, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 407
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-407

Query Match          15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 16;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 10 CTGGTTCAAGTCGTTCC 26
DB 1 CAGGUUCAACUCGUCG 17

RESULT 16
US-09-817-879-2048/c
; Sequence 2048, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2048
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2048
```

; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-2048

Query Match 15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 16;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 30 CGCTCACTCGGACCGG 46
Db 17 CGCTCGCGGCACCGG 1

RESULT 17

US-10-669-841-3000
; Sequence 3000, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; TITLE OF INVENTION: VIRUS REPLICATION
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3000
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-3000

Query Match 15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 16;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 10 CTGGTTCAGTGGTTCG 26
Db 1 CAGGUUCAACUCGCGG 17

RESULT 18

US-10-669-841-4641/c
; Sequence 4641, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; TITLE OF INVENTION: VIRUS REPLICATION
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4641
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-4641

Query Match 15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 16;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 30 CGCTCACTCGGACCGG 46
Db 17 CGCTCGCGGCACCGG 1

RESULT 19

US-09-504-231A-354
; Sequence 354, Application US/09504231A
; Patent No. US20020013458A1

GENERAL INFORMATION:
APPLICANT: Blatt, Lawrence
APPLICANT: McSwiggen, James
APPLICANT: Roberts, Beth
APPLICANT: Pavco, Pamela
APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
FILE REFERENCE: rpi 247/282
CURRENT APPLICATION NUMBER: US/09/504,231A
CURRENT FILING DATE: 2000-02-15
PRIOR APPLICATION NUMBER: 09/274,553
PRIOR FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/257,608
PRIOR FILING DATE: 1999-02-24
PRIOR APPLICATION NUMBER: 60/100,842
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/083,217
PRIOR FILING DATE: 1998-04-27
NUMBER OF SEQ ID NOS: 3242
SOFTWARE: PatentIn version 3.0
SEQ ID NO 354
LENGTH: 15
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
US-09-504-231A-354

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 15;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
||:||||:|
Db 4 CGUUCGCUUCGC 15

RESULT 20
US-09-274-553D-354
Sequence 354, Application US/09274553D
Patent No. US2002008225A1
GENERAL INFORMATION:
APPLICANT: Blatt, Lawrence
APPLICANT: McSwiggen, James
APPLICANT: Roberts, Beth
APPLICANT: Pavco, Pamela
APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
FILE REFERENCE: rpi 247/282
CURRENT APPLICATION NUMBER: US/09/274,553D
CURRENT FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/257,608
PRIOR FILING DATE: 1999-02-24
PRIOR APPLICATION NUMBER: 60/100,842
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/083,217
PRIOR FILING DATE: 1998-04-27
NUMBER OF SEQ ID NOS: 3148
SOFTWARE: PatentIn version 3.0
SEQ ID NO 354
LENGTH: 15
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
US-09-274-553D-354

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 15;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
||:||||:|
Db 4 CGUUCGCUUCGC 15

RESULT 21
US-09-740-332-1504
Sequence 1504, Application US/09740332
Publication No. US20030125270A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
FILE REFERENCE: RPI 400/003
CURRENT APPLICATION NUMBER: US/09/740,332
CURRENT FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 9704
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1504
LENGTH: 17
TYPE: RNA
ORGANISM: artificial sequence
FEATURE:
NAME/KEY: misc_feature
LOCATION:
OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-1504

Query Match 15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 17;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
||:||||:|
Db 4 CGUUCGCUUCGC 15

RESULT 22
US-09-740-332-3051/c
Sequence 3051, Application US/09740332
Publication No. US20030125270A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
FILE REFERENCE: RPI 400/003
CURRENT APPLICATION NUMBER: US/09/740,332
CURRENT FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 9704
SOFTWARE: PatentIn version 3.0
SEQ ID NO 3051
LENGTH: 17
TYPE: RNA
ORGANISM: artificial sequence
FEATURE:
NAME/KEY: misc_feature
LOCATION:
OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3051

Query Match 15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
||:||||:|
Db 15 CGTTCGCTTCGC 4

RESULT 23
US-09-817-879-1504
Sequence 1504, Application US/09817879
Publication No. US20030171311A1

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; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1504
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-1504

Query Match          15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 17;
Matches      8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      21  CGTTCGCTTCGC 32
Db      4  CGUUCGCUUCCG 15

RESULT 24
US-09-817-879-3051/c
; Sequence 3051, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3051
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3051

Query Match          15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 17;
Matches     12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      21  CGTTCGCTTCGC 32
Db      15  CGTTCGCTTCGC 4

RESULT 25
US-10-669-841-4097
; Sequence 4097, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper

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; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPATITIS C VIRUS
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4097
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-4097

Query Match          15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 17;
Matches      8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      21  CGTTCGCTTCGC 32
Db      4  CGUUCGCUUCCG 15

RESULT 26
US-10-669-841-5644/c
; Sequence 5644, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPATITIS C VIRUS
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08

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; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5644
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-5644

Query Match          15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 CGTTCGCTTCGC 32
DB 15 CGTTCGCTTCGC 4

RESULT 27
US-09-740-332-4758/c
; Sequence 4758, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4758
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-4758

Query Match          15.3%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 16;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 9 ACTGGTTCACGTCGT 23
DB 15 ACAGGTTCAACTCGT 1

RESULT 28
US-09-740-332-4758/c
; Sequence 4758, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4758
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-4758

Query Match          15.3%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 16;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 9 ACTGGTTCACGTCGT 23
DB 15 ACAGGTTCAACTCGT 1

RESULT 29
US-10-669-841-7352/c
; Sequence 7352, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patricia, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPATITIS C VIRUS
; TITLE OF INVENTION: VIRUS REPLICATION
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
```

```
; SEQ ID NO 7352
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-7352

Query Match      15.3%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 16;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      9 ACTGGTTCAAGTCGT 23
Db      15 ACAGGTTCAACTCGT 1

RESULT 30
US-09-740-332-9664/c
; Sequence 9664, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9664
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: n is inverted deoxyabasic
US-09-740-332-9664

Query Match      15.3%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 17;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      9 ACTGGTTCAAGTCGT 23
Db      15 ACAGGTTCAACTCGT 1

RESULT 31
US-09-817-879-9664/c
; Sequence 9664, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MH800-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9664
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
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; OTHER INFORMATION: n is inverted deoxyabasic
US-09-817-879-9664

Query Match      15.3%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 17;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      9 ACTGGTTCAAGTCGT 23
Db      15 ACAGGTTCAACTCGT 1

RESULT 32
US-10-669-841-7415/c
; Sequence 7415, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPATITIS C VIRUS
; FILE REFERENCE: 400/042US (MH802-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7415
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: n is inverted deoxyabasic
US-10-669-841-7415

Query Match      15.3%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 17;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      9 ACTGGTTCAAGTCGT 23
Db      15 ACAGGTTCAACTCGT 1
```


RESULT 33

US-10-090-182A-29/c

; Sequence 29, Application US/10090182A

; Publication No. US20030103936A1

GENERAL INFORMATION:

; APPLICANT: Abrams, Mark A.

; Bauer, S. C.

; Braford-Goldberg, Sarah R.

; Caparon, Maire H.

; Easton, Alan M.

; Klein, Barbara K.

; McKearn, John P.

; Olins, Peter O.

; Paik, Kuman

; Thomas, John W.

; TITLE OF INVENTION: Methods of Ex-vivo Expansion of

; Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple

; Mutation Polypeptides

; NUMBER OF SEQUENCES: 415

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: S. Christopher Bauer, Pharmacia Corp

; Corporate Patent Dept. Mail Zone O4E

; STREET: 800 N. Lindbergh Blvd.

; CITY: St. Louis

; STATE: Missouri

; COUNTRY: USA

; ZIP: 63167

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/090,182A

; FILING DATE: 03-Apr-2002

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/764,114

; FILING DATE: 09-DEC-1996

; APPLICATION NUMBER: US 07/981,044

; FILING DATE: 24-NOV-1992

; APPLICATION NUMBER: PCT/US93/11197

; FILING DATE: 22-NOV-1993

; APPLICATION NUMBER: 08/411,795

; FILING DATE: 04-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: S. Christopher Bauer

; REGISTRATION NUMBER: 42,305

; REFERENCE/DOCKET NUMBER: C2713/12

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (636)737-6257

; TELEFAX: (736)737-6257

; INFORMATION FOR SEQ ID NO: 29:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 16 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (synthetic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 29:

US-10-090-182A-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;

Best Local Similarity 81.2%; Pred. No. 22;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17

||| ||| ||| |||

Db 16 CCTGACATATGGTTCA 1

RESULT 34

US-10-090-182A-168/c

; Sequence 168, Application US/10090182A

; Publication No. US20030103936A1

GENERAL INFORMATION:

; APPLICANT: Abrams, Mark A.

; Bauer, S. C.

; Braford-Goldberg, Sarah R.

; Caparon, Maire H.

; Easton, Alan M.

; Klein, Barbara K.

; McKearn, John P.

; Olins, Peter O.

; Paik, Kuman

; Thomas, John W.

; TITLE OF INVENTION: Methods of Ex-vivo Expansion of

; Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple

; Mutation Polypeptides

; NUMBER OF SEQUENCES: 415

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: S. Christopher Bauer, Pharmacia Corp

; Corporate Patent Dept. Mail Zone O4E

; STREET: 800 N. Lindbergh Blvd.

; CITY: St. Louis

; STATE: Missouri

; COUNTRY: USA

; ZIP: 63167

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/090,182A

; FILING DATE: 03-Apr-2002

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/764,114

; FILING DATE: 09-DEC-1996

; APPLICATION NUMBER: US 07/981,044

; FILING DATE: 24-NOV-1992

; APPLICATION NUMBER: PCT/US93/11197

; FILING DATE: 22-NOV-1993

; APPLICATION NUMBER: 08/411,795

; FILING DATE: 04-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: S. Christopher Bauer

; REGISTRATION NUMBER: 42,305

; REFERENCE/DOCKET NUMBER: C2713/12

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (636)737-6257

; TELEFAX: (736)737-6257

; INFORMATION FOR SEQ ID NO: 168:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 16 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (synthetic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 168:

US-10-090-182A-168

Query Match 14.5%; Score 11.2; DB 1; Length 16;

Best Local Similarity 81.2%; Pred. No. 22;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCA 17

||| ||| ||| |||

Db 16 CCTGACATATGGTTCA 1

RESULT 35

US-10-078-113-29/c

; Sequence 29, Application US/10078113
; Publication No. US20030220472A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.

; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olin, Peter O.
; Paik, Kumnan
; Thomas, John W.

TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation

NUMBER OF SEQUENCES: 415

CORRESPONDENCE ADDRESS:

ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
Corporate Patent Dept.

STREET: P. O. Box 5110

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60680

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/078,113

FILING DATE: 19-Feb-2002

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/469,419

FILING DATE: <Unknown>

APPLICATION NUMBER: 08/411,795

FILING DATE: <Unknown>

APPLICATION NUMBER: PCT/US93/11197

FILING DATE: 22-NOV-1993

ATTORNEY/AGENT INFORMATION:

NAME: Bennett, Dennis A.

REGISTRATION NUMBER: 34,547

REFERENCE/DOCKET NUMBER: C2713/2

TELECOMMUNICATION INFORMATION:

TELEPHONE: (708)470-6501

TELEFAX: (708)470-6881

LENGTH: 16 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (synthetic)

SEQUENCE DESCRIPTION: SEQ ID NO: 29:

US-10-078-113-29

Query Match 14.5%; Score 11.2; DB 1; Length 16;

Best Local Similarity 81.2%; Pred. No. 22;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17

Db 16 CCTGACATATGGTTCA 1

RESULT 36

US-10-078-113-168/c

; Sequence 168, Application US/10078113

; Publication No. US20030220472A1

; GENERAL INFORMATION:

; APPLICANT: Abrams, Mark A.

; Bauer, S. C.

; Braford-Goldberg, Sarah R.

; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olin, Peter O.
; Paik, Kumnan
; Thomas, John W.

TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation

NUMBER OF SEQUENCES: 415

CORRESPONDENCE ADDRESS:

ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
Corporate Patent Dept.

STREET: P. O. Box 5110

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60680

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/078,113

FILING DATE: 19-Feb-2002

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/469,419

FILING DATE: <Unknown>

APPLICATION NUMBER: 08/411,795

FILING DATE: <Unknown>

APPLICATION NUMBER: PCT/US93/11197

FILING DATE: 22-NOV-1993

ATTORNEY/AGENT INFORMATION:

NAME: Bennett, Dennis A.

REGISTRATION NUMBER: 34,547

REFERENCE/DOCKET NUMBER: C2713/2

TELECOMMUNICATION INFORMATION:

TELEPHONE: (708)470-6501

TELEFAX: (708)470-6881

LENGTH: 16 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (synthetic)

SEQUENCE DESCRIPTION: SEQ ID NO: 168:

US-10-078-113-168

Query Match 14.5%; Score 11.2; DB 1; Length 16;

Best Local Similarity 81.2%; Pred. No. 22;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17

Db 16 CCTGACATATGGTTCA 1

RESULT 37

US-10-179-940-29/c

; Sequence 29, Application US/10179940

; Publication No. US20040018618A1

; GENERAL INFORMATION:

; APPLICANT: Abrams, Mark A.

; Bauer, S. C.

; Braford-Goldberg, Sarah R.

; Caparon, Mairé H.

; Easton, Alan M.

; Klein, Barbara K.

; McKearn, John P.

; Olin, Peter O.

; Paik, Kumnan

Polazzi, Joseph O.
TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
NUMBER OF SEQUENCES: 549
CORRESPONDENCE ADDRESS:
ADDRESSEE: Carol M. Nielsen, Gardere Wynne Sewell LLP,
STREET: 1601 Elm Street, Suite 3000
CITY: Dallas
STATE: Texas
COUNTRY: USA
ZIP: 75201-4761
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/179,940
FILING DATE: 19-Jun-2002
CLASSIFICATION: Unknown
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/981044
FILING DATE: 24-NOV-1992
APPLICATION NUMBER: PCT/US93/11198
FILING DATE: 22-NOV-1993
APPLICATION NUMBER: US 08/411796
FILING DATE: 09-APR-1995
APPLICATION NUMBER: US 08/559390
FILING DATE: 15-NOV-1995
ATTORNEY/AGENT INFORMATION:
NAME: Carol M. Nielsen
REGISTRATION NUMBER: 37,676
REFERENCE/DOCKET NUMBER: 126181-1056 (C2713/1)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (713)276-5383
TELEFAX: (713)276-5555
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)
SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-10-179-940-29
Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 22;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2 CCTACACTGGTTCA 17
DB 16 CCTGACATATGGTTCA 1
RESULT 38
US-10-674-836-7
Sequence 7, Application US/10674836
Publication No. US2004007287A1
GENERAL INFORMATION:
APPLICANT: Morin, Gregg B.
APPLICANT: Lichtsteiner, Serge
APPLICANT: Vasserot, Alain
APPLICANT: Adams, Robert R.
APPLICANT: Geron Corporation
TITLE OF INVENTION: Telomerase Reverse Transcriptase Transcriptional
Regulatory Sequences and Methods of Using
FILE REFERENCE: 019/246P
CURRENT APPLICATION NUMBER: US/10/674,836
CURRENT FILING DATE: 2003-09-29
PRIOR APPLICATION NUMBER: US/09/244,438
PRIOR FILING DATE: 1999-02-04
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 7
LENGTH: 16
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: RA97
US-10-674-836-7
Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 22;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 17 AAGTCGTCGCTTCGC 32
DB 1 AATTCGTAAGCTTCGC 16
RESULT 39
US-09-504-231A-353
Sequence 353, Application US/09504231A
Patent No. US20020013458A1
GENERAL INFORMATION:
APPLICANT: Blatt, Lawrence
APPLICANT: McSwiggen, James
APPLICANT: Roberts, Beth
APPLICANT: Pavco, Pamela
APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
FILE REFERENCE: fpi 247/282
CURRENT APPLICATION NUMBER: US/09/504,231A
PRIOR FILING DATE: 2000-02-15
PRIOR APPLICATION NUMBER: 09/274,553
PRIOR FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/257,608
PRIOR FILING DATE: 1999-02-24
PRIOR APPLICATION NUMBER: 60/100,842
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/083,217
PRIOR FILING DATE: 1998-04-27
NUMBER OF SEQ ID NOS: 3242
SOFTWARE: PatentIn version 3.0
SEQ ID NO 353
LENGTH: 15
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
US-09-504-231A-353
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 21;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 21 CGTTCGCTTCG 31
DB 5 CGUUGCUUCG 15
RESULT 40
US-09-504-231A-355
Sequence 355, Application US/09504231A
Patent No. US20020013458A1
GENERAL INFORMATION:
APPLICANT: Blatt, Lawrence
APPLICANT: McSwiggen, James
APPLICANT: Roberts, Beth
APPLICANT: Pavco, Pamela
APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELAT
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
FILE REFERENCE: fpi 247/282
CURRENT APPLICATION NUMBER: US/09/504,231A

; CURRENT FILING DATE: 2000-02-15
 ; PRIOR APPLICATION NUMBER: 09/274,553
 ; PRIOR FILING DATE: 1999-03-23
 ; PRIOR APPLICATION NUMBER: 09/257,608
 ; PRIOR FILING DATE: 1999-02-24
 ; PRIOR APPLICATION NUMBER: 60/100,842
 ; PRIOR FILING DATE: 1998-09-18
 ; PRIOR APPLICATION NUMBER: 60/083,217
 ; PRIOR FILING DATE: 1998-04-27
 ; NUMBER OF SEQ ID NOS: 3242
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 355
 ; LENGTH: 15
 ; TYPE: RNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
 US-09-504-231A-355

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 21;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 22 GTTCGCTTCGC 32
 Db 1 GUUGCGUUCGC 11

RESULT 41
 US-09-274-553D-353
 ; Sequence 353, Application US/09274553D
 ; Patent No. US20020082225A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Blatt, Lawrence
 ; APPLICANT: McSwiggen, James
 ; APPLICANT: Roberts, Beth
 ; APPLICANT: Pavco, Pamela
 ; APPLICANT: Macejak, Dennis
 ; TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
 ; FILE REFERENCE: IPI 247/282
 ; CURRENT APPLICATION NUMBER: US/09/274,553D
 ; CURRENT FILING DATE: 1999-03-23
 ; PRIOR APPLICATION NUMBER: 09/257,608
 ; PRIOR FILING DATE: 1999-02-24
 ; PRIOR APPLICATION NUMBER: 60/100,842
 ; PRIOR FILING DATE: 1998-09-18
 ; PRIOR APPLICATION NUMBER: 60/083,217
 ; PRIOR FILING DATE: 1998-04-27
 ; NUMBER OF SEQ ID NOS: 3148
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 353
 ; LENGTH: 15
 ; TYPE: RNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
 US-09-274-553D-353

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 21;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 21 CGTTCGCTTCG 31
 Db 5 CGUUGCGUUCG 15

RESULT 42
 US-09-274-553D-355
 ; Sequence 355, Application US/09274553D
 ; Patent No. US20020082225A1
 ; GENERAL INFORMATION:

; APPLICANT: Blatt, Lawrence
 ; APPLICANT: McSwiggen, James
 ; APPLICANT: Roberts, Beth
 ; APPLICANT: Pavco, Pamela
 ; APPLICANT: Macejak, Dennis
 ; TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
 ; FILE REFERENCE: IPI 247/282
 ; CURRENT APPLICATION NUMBER: US/09/274,553D
 ; CURRENT FILING DATE: 1999-03-23
 ; PRIOR APPLICATION NUMBER: 09/257,608
 ; PRIOR FILING DATE: 1999-02-24
 ; PRIOR APPLICATION NUMBER: 60/100,842
 ; PRIOR FILING DATE: 1998-09-18
 ; PRIOR APPLICATION NUMBER: 60/083,217
 ; PRIOR FILING DATE: 1998-04-27
 ; NUMBER OF SEQ ID NOS: 3148
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 355
 ; LENGTH: 15
 ; TYPE: RNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
 US-09-274-553D-355

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 21;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 22 GTTCGCTTCGC 32
 Db 1 GUUGCGUUCGC 11

RESULT 43
 US-09-504-231A-441/c
 ; Sequence 441, Application US/09504231A
 ; Patent No. US20020013458A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Blatt, Lawrence
 ; APPLICANT: McSwiggen, James
 ; APPLICANT: Roberts, Beth
 ; APPLICANT: Pavco, Pamela
 ; APPLICANT: Macejak, Dennis
 ; TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
 ; FILE REFERENCE: IPI 247/282
 ; CURRENT APPLICATION NUMBER: US/09/504,231A
 ; CURRENT FILING DATE: 2000-02-15
 ; PRIOR APPLICATION NUMBER: 09/274,553
 ; PRIOR FILING DATE: 1999-03-23
 ; PRIOR APPLICATION NUMBER: 09/257,608
 ; PRIOR FILING DATE: 1999-02-24
 ; PRIOR APPLICATION NUMBER: 60/100,842
 ; PRIOR FILING DATE: 1998-09-18
 ; PRIOR APPLICATION NUMBER: 60/083,217
 ; PRIOR FILING DATE: 1998-04-27
 ; NUMBER OF SEQ ID NOS: 3242
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 441
 ; LENGTH: 15
 ; TYPE: RNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
 US-09-504-231A-441

Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 23;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 56 GCCCCTTAACCAA 69

Db 14 GCCCATAGCCAAA 1
||||| || |||||

RESULT 44
US-09-274-553D-441/c
; Sequence 441, Application US/09274553D
; Patent No.-US20020082225A1
; GENERAL INFORMATION:
; APPLICANT: Blatt, Lawrence
; APPLICANT: McSwiggen, James
; APPLICANT: Roberts, Beth
; APPLICANT: Pavco, Pamela
; APPLICANT: Macejak, Dennis
; TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
; TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
; FILE REFERENCE: IPI 247/282
; CURRENT APPLICATION NUMBER: US/09/274,553D
; CURRENT FILING DATE: 1999-03-23
; PRIOR APPLICATION NUMBER: 09/257,608
; PRIOR FILING DATE: 1999-02-24
; PRIOR APPLICATION NUMBER: 60/100,842
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/083,217
; PRIOR FILING DATE: 1998-04-27
; NUMBER OF SEQ ID NOS: 3148
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 441
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Target
US-09-274-553D-441

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 23;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 56 GCCCTTAACCAA 69
||||| |||||
Db 14 GCCCATAGCCAAA 1

RESULT 45
US-09-881-557A-10/c
; Sequence 10, Application US/09881557A
; Publication No. US2002017133A1
; GENERAL INFORMATION:
; APPLICANT: EGHOLM, Michael
; APPLICANT: CHEN, Caifu
; TITLE OF INVENTION: TEMPLATE-DEPENDENT LIGATION WITH PNA-DNA CHIMERIC
; TITLE OF INVENTION: PROBES
; FILE REFERENCE: 4474US
; CURRENT APPLICATION NUMBER: US/09/881,557A
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US/09/416,003
; PRIOR FILING DATE: 1999-10-08
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Bacterial
US-09-881-557A-10

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 23;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 48 TAAAGCGGCCCT 61

Db 15 TAAAGCGGCACCT 2
||||| ||||| |||

RESULT 46
US-09-825-805-127
; Sequence 127, Application US/09825805
; Publication No. US20030004122A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleot
; FILE REFERENCE: MBHB00-831-F (400/009)
; CURRENT APPLICATION NUMBER: US/09/825,805
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: 09/578,223
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 09/476,387
; PRIOR FILING DATE: 1999-12-30
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29
; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/064,866
; PRIOR FILING DATE: 1997-11-05
; NUMBER OF SEQ ID NOS: 1558
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 127
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-825-805-127

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 66.7%; Pred. No. 22;
Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 26 GCTTCGCTCACT 37
|||: |||: |||:
Db 2 GCUGCGCUCACU 13

RESULT 47
US-09-825-805-185/c
; Sequence 185, Application US/09825805
; Publication No. US20030004122A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleo
; FILE REFERENCE: MBHB00-831-F (400/009)
; CURRENT APPLICATION NUMBER: US/09/825,805
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: 09/578,223
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 09/476,387
; PRIOR FILING DATE: 1999-12-30
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29

```

; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/064,866
; PRIOR FILING DATE: 1997-11-05
; NUMBER OF SEQ ID NOS: 1558
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 185
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-825-805-185

Query Match      13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 22;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 51 AGCGGCGCCCTT 62
Db 13 AGCGAGCCCTT 2

RESULT 48
US-10-132-002-6
; Sequence 6, Application US/10132002
; Publication No. US20030022204A1
; GENERAL INFORMATION:
; APPLICANT: Lansdorp, Peter
; TITLE OF INVENTION: Method for Detecting Multiple Copies of
; a Repeat Sequence in a Nucleic Acid Molecule
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HOWSON & HOWSON
; STREET: 321 No. US20030022204A1ristown Road
; CITY: Spring House
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19477
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/132,002
; FILING DATE: 25-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/730,635
; FILING DATE: 11-OCT-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Bak, Mary E.
; REGISTRATION NUMBER: 31,215
; REFERENCE/DOCKET NUMBER: B&P7USA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 540-9200
; TELEFAX: (215) 540-5818
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-10-132-002-6

Query Match      12.7%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 30;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAC 70
Db 14 CCCTAATAAC 2

RESULT 50
US-10-166-225A-16
; Sequence 16, Application US/10166225A
; Publication No. US20030148416A1
; GENERAL INFORMATION:
; APPLICANT: BERRY, Alan
; APPLICANT: BRETEL, Werner
; APPLICANT: HUMBELIN, Markus
; APPLICANT: LOPEZ-ULIBARRI, Rual
; APPLICANT: MAYER, Anne F.
; APPLICANT: YELISEEV, Alexei A.

```

;; TITLE OF INVENTION: IMPROVED ISOPRENOID PRODUCTION
;; FILE REFERENCE: C38435/121966
;; CURRENT APPLICATION NUMBER: US/10/166.225A
;; CURRENT FILING DATE: 2002-06-05
;; NUMBER OF SEQ ID NOS: 197
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 16
;; LENGTH: 14
;; TYPE: DNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: synthetic construct
US-10-166-225A-16

Query Match 12.7%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 30;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 35 ACTGGGACCGGC 47
Db 2 ACTGAGCTGCG 14

RESULT 51
US-10-090-182A-29
; Sequence 29, Application US/10090182A
; Publication No. US20030103936A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Ollins, Peter O.
; Paik, Kuman
; Thomas, John W.

TITLE OF INVENTION: Methods of Ex-vivo Expansion of Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple Mutation Polypeptides

NUMBER OF SEQUENCES: 415
CORRESPONDENCE ADDRESS:
ADDRESSEE: S. Christopher Bauer, Pharmacia Corp
Corporate Patent Dept. Mail Zone 04E
STREET: 800 N. Lindbergh Blvd.
CITY: St. Louis
STATE: Missouri
COUNTRY: USA
ZIP: 63167

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/090,182A
FILING DATE: 03-Apr-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/764,114
FILING DATE: 09-DEC-1996
APPLICATION NUMBER: US 07/981,044
FILING DATE: 24-NOV-1992
APPLICATION NUMBER: PCT/US93/11197
FILING DATE: 22-NOV-1993
APPLICATION NUMBER: 08/411,795
FILING DATE: 04-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: S. Christopher Bauer
REGISTRATION NUMBER: 42,305
REFERENCE/DOCKET NUMBER: C2713/12

TELECOMMUNICATION INFORMATION:
TELEPHONE: (636) 737-6257
TELEFAX: (736) 737-6257

TELEPHONE: (636) 737-6257
TELEFAX: (736) 737-6257
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (synthetic)
SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-10-090-182A-29

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 38;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 61 TTACCAAAAGCTTAGG 76
Db 1 TGAACCATATGTCAGG 16

RESULT 52
US-10-090-182A-168
; Sequence 168, Application US/10090182A
; Publication No. US20030103936A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Ollins, Peter O.
; Paik, Kuman
; Thomas, John W.

TITLE OF INVENTION: Methods of Ex-vivo Expansion of Hematopoietic Cells Using Interleukin-3 (IL-3) Multiple Mutation Polypeptides

NUMBER OF SEQUENCES: 415
CORRESPONDENCE ADDRESS:
ADDRESSEE: S. Christopher Bauer, Pharmacia Corp
Corporate Patent Dept. Mail Zone 04E
STREET: 800 N. Lindbergh Blvd.
CITY: St. Louis
STATE: Missouri
COUNTRY: USA
ZIP: 63167

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/090,182A
FILING DATE: 03-Apr-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/764,114
FILING DATE: 09-DEC-1996
APPLICATION NUMBER: US 07/981,044
FILING DATE: 24-NOV-1992
APPLICATION NUMBER: PCT/US93/11197
FILING DATE: 22-NOV-1993
APPLICATION NUMBER: 08/411,795
FILING DATE: 04-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: S. Christopher Bauer
REGISTRATION NUMBER: 42,305
REFERENCE/DOCKET NUMBER: C2713/12

TELECOMMUNICATION INFORMATION:
TELEPHONE: (636) 737-6257
TELEFAX: (736) 737-6257

```

; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 168:
US-10-090-182A-168

Query Match      12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 38;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy      61 TTAACCAACGTTAGG 76
Db      1 TGAACCATATGTCAGG 16

RESULT 53
US-10-078-113-29
; Sequence 29, Application US/10078113
; Publication No. US20030220472A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olines, Peter O.
; Paik, Kuman
; Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/078,113
; FILING DATE: 19-Feb-2002
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/469,419
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 08/411,795
; FILING DATE: <Unknown>
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

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; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-10-078-113-29

Query Match      12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 38;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy      61 TTAACCAACGTTAGG 76
Db      1 TGAACCATATGTCAGG 16

RESULT 54
US-10-078-113-168
; Sequence 168, Application US/10078113
; Publication No. US20030220472A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Mairé H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Olines, Peter O.
; Paik, Kuman
; Thomas, John W.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Multiple Mutation
; Polypeptides
; NUMBER OF SEQUENCES: 415
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dennis A. Bennett, G.D. Searle & Co.,
; STREET: P. O. Box 5110
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60680
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/078,113
; FILING DATE: 19-Feb-2002
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/469,419
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 08/411,795
; FILING DATE: <Unknown>
; APPLICATION NUMBER: PCT/US93/11197
; FILING DATE: 22-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Dennis A.
; REGISTRATION NUMBER: 34,547
; REFERENCE/DOCKET NUMBER: C2713/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708)470-6501
; TELEFAX: (708)470-6881
; INFORMATION FOR SEQ ID NO: 168:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 168:
US-10-078-113-168

Query Match      12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 38;

```


Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAACGTTAGG 76
| | | | | | | | | |
Db 1 TGAACCATATGTCAGG 16

RESULT 55
US-10-179-940-29
; Sequence 29, Application US/10179940
; Publication No. US20040018618A1
; GENERAL INFORMATION:
; APPLICANT: Abrams, Mark A.
; Bauer, S. C.
; Braford-Goldberg, Sarah R.
; Caparon, Maire H.
; Easton, Alan M.
; Klein, Barbara K.
; McKearn, John P.
; Oline, Peter O.
; Paik, Kumman
; Polazzi, Joseph O.
; TITLE OF INVENTION: Interleukin-3 (IL-3) Mutant Polypeptides
; NUMBER OF SEQUENCES: 549
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carol M. Nielsen, Gardere Wynne Sewell LLP,
; STREET: 1601 Elm Street, Suite 3000
; CITY: Dallas
; STATE: Texas
; COUNTRY: USA
; ZIP: 75201-4761
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/179,940
; FILING DATE: 19-Jun-2002
; CLASSIFICATION: Unknown
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/981044
; FILING DATE: 24-Nov-1992
; APPLICATION NUMBER: PCT/US93/11198
; FILING DATE: 22-Nov-1993
; APPLICATION NUMBER: US 08/411796
; FILING DATE: 09-Apr-1995
; APPLICATION NUMBER: US 08/559390
; FILING DATE: 15-Nov-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Carol M. Nielsen
; REGISTRATION NUMBER: 37,676
; REFERENCE/DOCKET NUMBER: 126181-1056 (C2713/1)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (713)276-5383
; TELEFAX: (713)276-5555
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (synthetic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:

Query Match 12.5%; Score 9.6; DB 1; Length 16;
Best Local Similarity 75.0%; Pred. No. 38;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 61 TTAACCAACGTTAGG 76
| | | | | | | | | |
Db 1 TGAACCATATGTCAGG 16

RESULT 56
US-09-249-155-245
; Sequence 245, Application US/09249155
; Publication No. US20030037345A1
; GENERAL INFORMATION:
; APPLICANT: Heber-Katz, Ellen
; TITLE OF INVENTION: Compositions and Methods for Wound
; TITLE OF INVENTION: Healing
; FILE REFERENCE: 00486.78503
; CURRENT APPLICATION NUMBER: US/09/249,155
; CURRENT FILING DATE: 1999-02-12
; EARLIER APPLICATION NUMBER: 60/074,737
; EARLIER FILING DATE: 1998-02-13
; EARLIER APPLICATION NUMBER: 60/097,937
; EARLIER FILING DATE: 1998-08-26
; EARLIER APPLICATION NUMBER: 60/102,051
; EARLIER FILING DATE: 1998-09-28
; NUMBER OF SEQ ID NOS: 254
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 245
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Mus musculus
; US-09-249-155-245

Query Match 12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 8 AACTGGTTCAA 18
| | | | | | | | | |
Db 1 AACAGGTTCAA 11

RESULT 57
US-10-314-322-245
; Sequence 245, Application US/10314322
; Publication No. US20030229911A1
; GENERAL INFORMATION:
; APPLICANT: Heber-Katz, Ellen
; TITLE OF INVENTION: Compositions and Methods for Wound
; TITLE OF INVENTION: Healing
; FILE REFERENCE: 000486.00016
; CURRENT APPLICATION NUMBER: US/10/314,322
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/074,737
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/097,937
; PRIOR FILING DATE: 1998-08-26
; PRIOR APPLICATION NUMBER: US 60/102,051
; PRIOR FILING DATE: 1998-09-28
; PRIOR APPLICATION NUMBER: US 09/249,155
; PRIOR FILING DATE: 1999-02-12
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 245
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Mus musculus
; US-10-314-322-245

Query Match 12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 8 AACTGGTTCAA 18
| | | | | | | | | |
Db 1 AACAGGTTCAA 11

RESULT 58

```
US-10-450-797-908
; Sequence 908, Application US/10450797
; Publication No. US20040142335A1
; GENERAL INFORMATION:
; APPLICANT: Petersohn, Dirk
; APPLICANT: Conradt, Marcus
; APPLICANT: Hofmann, Kay
; TITLE OF INVENTION: METHOD FOR DETERMINING SKIN STRESS OR SKIN AGEING IN VITRO
; FILE REFERENCE: HENK-0041
; CURRENT APPLICATION NUMBER: US/10/450,797
; CURRENT FILING DATE: 2003-12-04
; PRIOR APPLICATION NUMBER: PCT/EP01/15178
; PRIOR FILING DATE: 2001-12-20
; PRIOR APPLICATION NUMBER: DE 101 00 121.5
; PRIOR FILING DATE: 2001-01-03
; NUMBER OF SEQ ID NOS: 1435
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 908
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-450-797-908

Query Match      12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 0; Indels 1; Gaps 0;

Qy 50 AAGCCGCCGCC 60
    ||||| |||||
Db 1 AAGCCGCCGCC 11

RESULT 59
US-10-450-797-1002/c
; Sequence 1002, Application US/10450797
; Publication No. US20040142335A1
; GENERAL INFORMATION:
; APPLICANT: Petersohn, Dirk
; APPLICANT: Conradt, Marcus
; APPLICANT: Hofmann, Kay
; TITLE OF INVENTION: METHOD FOR DETERMINING SKIN STRESS OR SKIN AGEING IN VITRO
; FILE REFERENCE: HENK-0041
; CURRENT APPLICATION NUMBER: US/10/450,797
; CURRENT FILING DATE: 2003-12-04
; PRIOR APPLICATION NUMBER: PCT/EP01/15178
; PRIOR FILING DATE: 2001-12-20
; PRIOR APPLICATION NUMBER: DE 101 00 121.5
; PRIOR FILING DATE: 2001-01-03
; NUMBER OF SEQ ID NOS: 1435
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1002
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-450-797-1002

Query Match      12.2%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 26;
Matches 10; Conservative 0; Mismatches 0; Indels 1; Gaps 0;

Qy 24 TCGCTTCGCTC 34
    ||||| |||||
Db 11 TCGCTTCGCTC 11

RESULT 60
US-10-094-516B-50/c
; Sequence 50, Application US/10094516B
; Publication No. US20030157494A1
; GENERAL INFORMATION:
; APPLICANT: van Eijs, Guillaume
; APPLICANT: Hateboer, Guus
; APPLICANT: Havenga, Menzo
```

```
; TITLE OF INVENTION: Smooth Muscle Cell Promoter and Uses Thereof
; FILE REFERENCE: 05032-00016
; CURRENT APPLICATION NUMBER: US/10/094,516B
; CURRENT FILING DATE: 2002-03-08
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 50
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-094-516B-50

Query Match      12.2%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 29;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 31 GCTCACTCGGG 41
    ||||| |||||
Db 12 GCTCAGCGGG 2

RESULT 61
US-09-990-102-8/c
; Sequence 8, Application US/09990102
; Publication No. US20030099951A1
; GENERAL INFORMATION:
; APPLICANT: Haussler, David
; APPLICANT: Winters-Hilt, Stephen
; APPLICANT: Akesson, Mark
; APPLICANT: Vercoetere, Wenonah
; TITLE OF INVENTION: Methods and Devices for Characterizing
; FILE REFERENCE: UCAL199
; CURRENT APPLICATION NUMBER: US/09/990,102
; CURRENT FILING DATE: 2001-11-21
; PRIOR APPLICATION NUMBER: 60/253,393
; PRIOR FILING DATE: 2000-11-27
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-990-102-8

Query Match      12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 32;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 63 AACCAACGTT 73
    ||||| |||||
Db 12 AACCAACGTT 2

RESULT 62
US-10-156-433-31
; Sequence 31, Application US/10156433
; Publication No. US20030144489A1
; GENERAL INFORMATION:
; APPLICANT: Burgin, Alex
; APPLICANT: Beigelman, Leonid
; APPLICANT: Bellon, Laurent
; APPLICANT: Zinnen, Shawn
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MHB00-943-E (500.007)
; CURRENT APPLICATION NUMBER: US/10/156,433
; CURRENT FILING DATE: 2002-05-28
; PRIOR APPLICATION NUMBER: US 10/112,814
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 09/216,584
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FILE REFERENCE: USF1100-15
CURRENT APPLICATION NUMBER: US/10/338.587A
CURRENT FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: US 09/054,363
PRIOR FILING DATE: 1998-04-02 US 08/459,717
PRIOR APPLICATION NUMBER: US 08/386,680
PRIOR FILING DATE: 1995-06-02
PRIOR APPLICATION NUMBER: US 08/167,628
PRIOR FILING DATE: 1995-02-10
PRIOR APPLICATION NUMBER: US 07/752,427
PRIOR FILING DATE: 1993-12-14
PRIOR APPLICATION NUMBER: US 07/752,427
PRIOR FILING DATE: 1991-08-30
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 13
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Mutant TGF-beta response element
US-10-338-587A-16

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 32;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 55 GGCCCTTAAC 65
Db 13 GACCCCTTAAC 3

Search completed: October 29, 2004, 12:35:45
Job time : 0.001 secs

PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: US 09/094,381
PRIOR FILING DATE: 1998-06-09
PRIOR APPLICATION NUMBER: US 60/068,212
PRIOR FILING DATE: 1997-12-19
PRIOR APPLICATION NUMBER: US 60/049,002
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 72
SOFTWARE: PatentIn version 3.1
SEQ ID NO 31
LENGTH: 13
TYPE: DNA
ORGANISM: Homo sapiens
US-10-156-433-31

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 32;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 45 GCCTAAGCCG 55
Db 3 GCCTAAGCCG 13

RESULT 63
US-10-112-814-31
Sequence 31, Application US/10112814
Publication No. US20030170644A1
GENERAL INFORMATION:
APPLICANT: Alex, Burgin
APPLICANT: Leonid, Beigelman
APPLICANT: Laurent, Bellon
TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
FILE REFERENCE: MBH00-943-D; 400.005
CURRENT APPLICATION NUMBER: US/10/112,814
CURRENT FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: 09/216,584
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: 09/094,381
PRIOR FILING DATE: 1998-06-09
PRIOR APPLICATION NUMBER: 60/068,212
PRIOR FILING DATE: 1997-12-19
PRIOR APPLICATION NUMBER: 60/049,002
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn version 3.0
SEQ ID NO 31
LENGTH: 13
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc.feature
OTHER INFORMATION: Accessible site within UPA transcript
US-10-112-814-31

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 32;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 45 GCCTAAGCCG 55
Db 3 GCCTAAGCCG 13

RESULT 64
US-10-338-587A-16/c
Sequence 16, Application US/10338587A
Publication No. US20040005319A1
GENERAL INFORMATION:
APPLICANT: THE UNIVERSITY OF SOUTH FLORIDA
APPLICANT: GROTHENDORST, Gary R.
APPLICANT: BRADHAM, Douglass M.
TITLE OF INVENTION: CONNECTIVE TISSUE GROWTH FACTOR

Query Match 12.2%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 32;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 45 GCCTAAGCCG 55
Db 3 GCCTAAGCCG 13

RESULT 64
US-10-338-587A-16/c
Sequence 16, Application US/10338587A
Publication No. US20040005319A1
GENERAL INFORMATION:
APPLICANT: THE UNIVERSITY OF SOUTH FLORIDA
APPLICANT: GROTHENDORST, Gary R.
APPLICANT: BRADHAM, Douglass M.
TITLE OF INVENTION: CONNECTIVE TISSUE GROWTH FACTOR

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OM nucleic - nucleic search, using sw model

Run on: October 29, 2004, 12:31:20 ; Search time 1 Seconds
(without alignments)

1.187 Million cell updates/sec

Title: US-09-701-626A-11

Perfect score: 77

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Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 0.5

Searched: 397 seqs, 7705 residues

Total number of hits satisfying chosen parameters: 794

Minimum DB seq length: 10
Maximum DB seq length: 77

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 438 summaries

Database : rng11.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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| 73 | 14.2 | 18.4 | 19 | 1 | AAA87607 | Rat hepatocyte car |
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| 75 | 13.8 | 17.9 | 19 | 1 | ABE08818 | Cancer-related all |
| 76 | 13.4 | 17.4 | 15 | 1 | AAF51766 | IGF-I oligonucleot |
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| 80 | 13.4 | 17.4 | 18 | 1 | AAH40833 | SNP specific upper |
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| 83 | 13 | 16.9 | 76 | 1 | AAZ44901 | P. alcaligenes rep |
| 84 | 12.8 | 16.6 | 17 | 1 | AAV93448 | Human B-raf substr |
| 85 | 12.8 | 16.6 | 18 | 1 | AAZ38547 | IGF-I leukocyte a |
| 86 | 12.4 | 16.1 | 15 | 1 | AAF52745 | Bovine leukocyte a |
| 87 | 12.4 | 16.1 | 15 | 1 | AAF51767 | IGF-I oligonucleot |
| 88 | 12.4 | 16.1 | 15 | 1 | AAF51765 | IGF-I oligonucleot |
| 89 | 12.4 | 16.1 | 15 | 1 | AAF52742 | IGF-I oligonucleot |
| 90 | 12.4 | 16.1 | 17 | 1 | AAA79809 | Hepatitis B virus |
| 91 | 12.4 | 16.1 | 17 | 1 | AAA79811 | Hepatitis B virus |
| 92 | 12.4 | 16.1 | 17 | 1 | ACD60629 | HCV DNazyme substr |
| 93 | 12.4 | 16.1 | 17 | 1 | ACD62041 | HCV minus strand D |
| 94 | 12.4 | 16.1 | 17 | 1 | ACD62040 | HCV DNazyme substr |
| 95 | 12.4 | 16.1 | 17 | 1 | ADI85383 | HCV DNazyme substr |
| 96 | 12.4 | 16.1 | 17 | 1 | ADI85382 | HCV DNazyme substr |
| 97 | 12.4 | 16.1 | 17 | 1 | ADI84681 | P. alcaligenes rep |
| 98 | 12.4 | 16.1 | 73 | 1 | AAZ88521 | P. alcaligenes rep |
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| 101 | 12.4 | 16.1 | 76 | 1 | AAZ44903 | P. alcaligenes rep |
| 102 | 12.4 | 16.1 | 76 | 1 | AAZ44962 | P. alcaligenes rep |
| 103 | 12.2 | 15.8 | 17 | 1 | ACN13607 | WNV minus strand Z |
| 104 | 12.2 | 15.8 | 17 | 1 | ACN01433 | WNV inozyme substr |
| 105 | 12.2 | 15.8 | 17 | 1 | ACN09482 | WNV minus strand H |
| 106 | 12.2 | 15.8 | 17 | 1 | ACD60862 | HCV DNazyme substr |

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| C 255 | 10.4 | 13.5 | 13 | 1 | ABC62220 | Oligonucleotide SE | C 328 | 10 | 13.0 | 12 | 1 | ABH130664 | Oligonucleotide pr |
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| C 263 | 10.4 | 13.5 | 13 | 1 | ABC01742 | Oligonucleotide SE | C 336 | 10 | 13.0 | 13 | 1 | ABC46847 | Oligonucleotide SE |
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| C 270 | 10.4 | 13.5 | 13 | 1 | ABC47937 | Oligonucleotide SE | C 343 | 10 | 13.0 | 13 | 1 | ABC37107 | Oligonucleotide SE |
| C 271 | 10.4 | 13.5 | 13 | 1 | ABC53521 | Oligonucleotide SE | C 344 | 10 | 13.0 | 13 | 1 | ABC39242 | Oligonucleotide SE |
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| C 274 | 10.4 | 13.5 | 13 | 1 | ABH52144 | Oligonucleotide SE | C 347 | 10 | 13.0 | 13 | 1 | ABF42612 | Oligonucleotide SE |
| C 275 | 10.4 | 13.5 | 13 | 1 | ABH58715 | Oligonucleotide SE | C 348 | 10 | 13.0 | 13 | 1 | ABF76364 | Oligonucleotide SE |
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| C 292 | 10 | 13.0 | 10 | 1 | ABV99804 | Human PFKFB2 PCR p | C 365 | 10 | 13.0 | 13 | 1 | ABF33316 | Oligonucleotide SE |
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| C 313 | 10 | 13.0 | 12 | 1 | ABH84854 | Oligonucleotide pr | C 386 | 10 | 13.0 | 13 | 1 | ABF67071 | Oligonucleotide SE |
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| C 315 | 10 | 13.0 | 12 | 1 | ABT64791 | Oligonucleotide pr | C 388 | 10 | 13.0 | 13 | 1 | ABF19396 | Oligonucleotide SE |
| C 316 | 10 | 13.0 | 12 | 1 | ABT02552 | Oligonucleotide pr | C 389 | 10 | 13.0 | 13 | 1 | ABF26800 | Oligonucleotide SE |
| C 317 | 10 | 13.0 | 12 | 1 | ABT23793 | Oligonucleotide pr | C 390 | 10 | 13.0 | 13 | 1 | ABH52029 | Oligonucleotide SE |
| C 318 | 10 | 13.0 | 12 | 1 | ABT30774 | Oligonucleotide pr | C 391 | 10 | 13.0 | 13 | 1 | ABF99752 | Oligonucleotide SE |
| C 319 | 10 | 13.0 | 12 | 1 | ABT50579 | Oligonucleotide pr | C 392 | 10 | 13.0 | 13 | 1 | ABH01154 | Oligonucleotide SE |
| C 320 | 10 | 13.0 | 12 | 1 | ABT73568 | Oligonucleotide pr | C 393 | 10 | 13.0 | 13 | 1 | ABF78919 | Oligonucleotide SE |
| C 321 | 10 | 13.0 | 12 | 1 | ABT31939 | Oligonucleotide pr | C 394 | 10 | 13.0 | 13 | 1 | ABH34877 | Oligonucleotide SE |
| C 322 | 10 | 13.0 | 12 | 1 | ABT112963 | Oligonucleotide pr | C 395 | 10 | 13.0 | 13 | 1 | ABC46846 | Oligonucleotide SE |
| C 323 | 10 | 13.0 | 12 | 1 | ABT30959 | Oligonucleotide pr | C 396 | 10 | 13.0 | 13 | 1 | ABF01562 | Oligonucleotide SE |
| C 324 | 10 | 13.0 | 12 | 1 | ABH99100 | Oligonucleotide pr | C 397 | 10 | 13.0 | 13 | 1 | ABF09198 | Oligonucleotide SE |
| C 325 | 10 | 13.0 | 12 | 1 | ABH77029 | Oligonucleotide pr | C 398 | 10 | 13.0 | 13 | 1 | ABC37746 | Oligonucleotide SE |

XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 CC
 CC Sequence 77 BP; 18 A; 25 C; 17 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 97.9%; Score 75.4; DB 1; Length 77;
 Best Local Similarity 98.7%; Pred. No. 3.4e-10;
 Matches 76; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ACCTAACACTGGTTCAAGTCGTTTCGCTTCTCGTCACTCGGACCGGCTAAAGCGGCCCC 60
 DB 1 ACCTAACAAATGGTTCAAGTCGTTTCGCTTCTCGTCACTCGGACCGGCTAAAGCGGCCCC 60
 QY 61 TTAACCAACGTTAGGC 77
 DB 61 TTAACCAACGTTAGGC 77
 RESULT 3
 AAZ44952
 ID AAZ44952 standard; DNA; 77 BP.
 AC AAZ44952;
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #59.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 PN 16-DEC-1999.
 XX 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA Raleigh EA, Vaivavila R, Morgan RD;
 PI WPI; 2000-116558/10.
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 60; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting

CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 CC
 CC Sequence 77 BP; 18 A; 25 C; 18 G; 16 T; 0 U; 0 Other;
 SQ
 Query Match 96.6%; Score 74.4; DB 1; Length 77;
 Best Local Similarity 98.7%; Pred. No. 5.4e-10;
 Matches 75; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 CCTAACCAACTGGTTCAAGTCGTTTCGCTTCTCGTCACTCGGACCGGCTAAAGCGGCCCC 61
 DB 2 CCTAACCAAAATGGTTCAAGTCGTTTCGCTTCTCGTCACTCGGACCGGCTAAAGCGGCCCC 61
 QY 62 TAACCAAAACGTTAGGC 77
 DB 62 TAACCAAAACGTTAGGC 77
 RESULT 4
 AAZ44957
 ID AAZ44957 standard; DNA; 77 BP.
 XX AAZ44957;
 AC AAZ44957;
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #64.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 PN 16-DEC-1999.
 XX 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA Raleigh EA, Vaivavila R, Morgan RD;
 PI WPI; 2000-116558/10.
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 60; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability of association with
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX
 SQ Sequence 77 BP; 16 A; 26 C; 18 G; 17 T; 0 U; 0 Other;

Query Match 96.6%; Score 74.4; DB 1; Length 77;
 Best Local Similarity 98.7%; Pred. No. 5.4e-10;
 Matches 75; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 CCTAACAACTGGTTCAAGTCGTTTCGCTTCTGCTCACTCGGACCGGCTAAAGCCGCCCT 61
 DB 2 CCTAACTACTGGTTCAAGTCGTTTCGCTTCTGCTCACTCGGACCGGCTAAAGCCGCCCT 61
 QY 62 TAACCAACGTTAGGC 77
 DB 62 TAACCAACGTTAGGC 77

RESULT 5
 AA244987
 ID AA244987 standard; DNA; 77 BP.
 AC AA244987;
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element family 1 consensus DNA #3.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; family 1; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 PN 16-DEC-1999.
 PD 11-JUN-1999; 99WO-US013295.
 PF 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA Raleigh EA, Vaisvila R, Morgan RD;
 PI WPI; 2000-116558/10.
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX Example 1B; Fig 6A; 97pp; English.

This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation

CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244985-244987 represents Pseudomonas
 CC alcaligenes repeat (PAR) element family 1 consensus sequences described
 CC in the method of the invention
 XX
 SQ Sequence 77 BP; 17 A; 26 C; 18 G; 16 T; 0 U; 0 Other;

Query Match 94.5%; Score 72.8; DB 1; Length 77;
 Best Local Similarity 97.4%; Pred. No. 1.1e-09;
 Matches 74; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 CCTAACAACTGGTTCAAGTCGTTTCGCTTCTGCTCACTCGGACCGGCTAAAGCCGCCCT 61
 DB 2 CCTAACAACTGGTTCAAGTCGTTTCGCTTCTGCTCACTCGGACCGGCTAAAGCCGCCCT 61
 QY 62 TAACCAACGTTAGGC 77
 DB 62 TAACCAACGTTAGGC 77

RESULT 6
 AA288511
 ID AA288511 standard; DNA; 74 BP.
 AC AA288511;
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA PARf8.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 PN 16-DEC-1999.
 PD 11-JUN-1999; 99WO-US013295.
 PF 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA Raleigh EA, Vaisvila R, Morgan RD;
 PI WPI; 2000-116558/10.
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX Example 1B; Fig 3E; 97pp; English.

This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability of association with
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
 CC alcaligenes repeat (PAR) elements described in the method of the
 CC invention


```

QY      63 AACCAACGTTAGGC 77
Db      63 AACCAACGTTAGGC 77

RESULT 9
AAZ44990
ID      AAZ44990 standard; DNA; 77 BP.
XX
AC      AAZ44990;
XX
DT      16-MAY-2000 (first entry)
XX
DE      P. alcaligenes repeat (PAR) element family 2 consensus DNA #3.
XX
KW      Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW      detoxifying enzyme; repeat element; PAR; family 2; ss.
XX
OS      Pseudomonas alcaligenes.
XX
PN      WO9964632-Al.
XX
PD      16-DEC-1999.
XX
PF      11-JUN-1999; 99WO-US013295.
XX
PR      12-JUN-1998; 98US-0089086P.
PR      12-JUN-1998; 98US-0089101P.
XX
PA      (NEWE ) NEW ENGLAND BIOLABS INC.
XX
PI      Raleigh EA, Vaisvila R, Morgan RD;
XX
DR      WPI; 2000-116558/10.
XX
XX      Cloning intact genes used to isolate genes for restriction enzymes.
XX
PS      Example 1B; Fig 6B; 97pp; English.
XX
CC      This invention describes a novel method for cloning intact, diversity-
CC      selected genes (I) from within gene cassettes (GC) which comprises
CC      identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC      to these repeats and amplification to produce DNA fragments containing
CC      (I), ligating these fragments into a vector and transforming cells with
CC      the vector. This method is used to clone a wide variety of prokaryotic
CC      genes that provide a selective advantage under particular conditions,
CC      particularly those that encode restriction enzymes (used as reagents in
CC      molecular biology); adhesins (for use in coating or for targeting
CC      molecules or organisms to particular sites, e.g. for competitive
CC      exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC      interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC      the toxin, or in vaccination, or a modification methyltransferase. Intact
CC      genes can be cloned directly with a high probability that the orientation
CC      of expression is known in advance and low probability of association with
CC      extraneous, possibly toxic, genes. AAZ44988-244990 represents Pseudomonas
CC      alcaligenes repeat (PAR) element family 2 consensus sequences described
CC      in the method of the invention
XX
SQ      Sequence 77 BP; 16 A; 26 C; 20 G; 15 T; 0 U; 0 Other;

      Query Match      93.2%; Score 71.8; DB 1; Length 77;
      Best Local Similarity 97.3%; Pred. No. 1.8e-09;
      Matches 73; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2 CCTAACAACTCGTTCAAGTCGTTTCGCTTCGCTCACTCGGGACCGGCTAAAGCCGCCCTT 61
Db      2 CCTAACAACTCGTTCAAGTCGTTTCGCTTCGCTCGCTCGGGACCGGCTAAAGCCGCCCTT 61

QY      62 TAACCAACGTTAGG 76
Db      62 TAACCAACGTTAGG 76

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RESULT 10
AAZ44944
ID      AAZ44944 standard; DNA; 77 BP.
XX
AC      AAZ44944;
XX
DT      16-MAY-2000 (first entry)
XX
DE      P. alcaligenes repeat (PAR) element DNA #51.
XX
KW      Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW      detoxifying enzyme; repeat element; PAR; ss.
XX
OS      Pseudomonas alcaligenes.
XX
PN      WO9964632-Al.
XX
PD      16-DEC-1999.
XX
PF      11-JUN-1999; 99WO-US013295.
XX
PR      12-JUN-1998; 98US-0089086P.
PR      12-JUN-1998; 98US-0089101P.
XX
PA      (NEWE ) NEW ENGLAND BIOLABS INC.
XX
PI      Raleigh EA, Vaisvila R, Morgan RD;
XX
DR      WPI; 2000-116558/10.
XX
XX      Cloning intact genes used to isolate genes for restriction enzymes.
XX
PS      Claim 7a; Page 60; 97pp; English.
XX
CC      This invention describes a novel method for cloning intact, diversity-
CC      selected genes (I) from within gene cassettes (GC) which comprises
CC      identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC      to these repeats and amplification to produce DNA fragments containing
CC      (I), ligating these fragments into a vector and transforming cells with
CC      the vector. This method is used to clone a wide variety of prokaryotic
CC      genes that provide a selective advantage under particular conditions,
CC      particularly those that encode restriction enzymes (used as reagents in
CC      molecular biology); adhesins (for use in coating or for targeting
CC      molecules or organisms to particular sites, e.g. for competitive
CC      exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC      interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC      the toxin, or in vaccination, or a modification methyltransferase. Intact
CC      genes can be cloned directly with a high probability that the orientation
CC      of expression is known in advance and low probability of association with
CC      extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC      Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC      the invention
XX
SQ      Sequence 77 BP; 16 A; 26 C; 16 G; 19 T; 0 U; 0 Other;

      Query Match      93.2%; Score 71.8; DB 1; Length 77;
      Best Local Similarity 97.3%; Pred. No. 1.8e-09;
      Matches 73; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3 CTAAACAACTCGTTCAAGTCGTTTCGCTTCGCTCACTCGGGACCGGCTAAAGCCGCCCTT 62
Db      3 CTAACTACTCGTTCAAGTCGTTTCGCTTCGCTCACTCGGGACCGGCTAAAGCCGCCCTT 62

QY      63 AACCAACGTTAGGC 77
Db      63 AACCAACGTTAGGC 77

RESULT 11
AAZ88505
ID      AAZ88505 standard; DNA; 74 BP.
XX
AC      AAZ88505;

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XX 16-MAY-2000 (first entry)
 DT P. alcaligenes repeat (PAR) element DNA PARf2.
 XX
 DE Diversity-selected gene; restriction enzyme; adhesin; toxin;
 XX detoxifying enzyme; repeat element; PAR; ss.
 KW Pseudomonas alcaligenes.
 XX
 OS WO9964632-A1.
 FN 16-DEC-1999.
 XX
 PD 11-JUN-1999; 99WO-US013295.
 XX
 XX 12-JUN-1998; 98US-0089086P.
 FN 12-JUN-1998; 98US-0089101P.
 PR
 XX (NEW) NEW ENGLAND BIOLABS INC.
 PA
 XX Raleigh EA, Vaisvila R, Morgan RD;
 FI WPI; 2000-116558/10.
 XX
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 XX Example 1B; Fig 3E; 97pp; English.
 PS
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AZ88504-288521 represent Pseudomonas
 CC alcaligenes repeat (PAR) elements described in the method of the
 CC invention
 XX
 SQ Sequence 74 BP; 16 A; 25 C; 16 G; 17 T; 0 U; 0 Other;
 Query Match 92.7%; Score 71.4; DB 1; Length 74;
 Best Local Similarity 98.6%; Pred. No. 2e-09;
 Matches 72; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 CTAACACTGGTTCAAGTTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
 DB 1 CTAACACTGGTTCAAGTTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
 QY 63 AACCAACGTTAG 75
 DB 61 AACCAACGTTAG 73
 RESULT 12
 AAZ44966
 ID AAZ44966 standard; DNA; 77 BP.
 XX
 AC AAZ44966;
 XX
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #73.
 XX

KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 XX detoxifying enzyme; repeat element; PAR; ss.
 OS Pseudomonas alcaligenes.
 XX
 FN WO9964632-A1.
 PD 16-DEC-1999.
 XX
 XX 11-JUN-1999; 99WO-US013295.
 FN 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEW) NEW ENGLAND BIOLABS INC.
 XX
 FI Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-116558/10.
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 XX Claim 7a; Page 61; 97pp; English.
 PS
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX
 SQ Sequence 77 BP; 19 A; 26 C; 17 G; 15 T; 0 U; 0 Other;
 Query Match 92.5%; Score 71.2; DB 1; Length 77;
 Best Local Similarity 96.1%; Pred. No. 2.3e-09;
 Matches 73; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2 CCTAACAACTGGTTCAAGTTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61
 DB 2 CCTAACAACTGGTTCAAGTTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61
 QY 62 TAACCAACGTTAGG 77
 DB 62 TAACCAACGTTAGG 77
 RESULT 13
 AAZ44930
 ID AAZ44930 standard; DNA; 77 BP.
 XX
 AC AAZ44930;
 XX
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #37.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 XX detoxifying enzyme; repeat element; PAR; ss.
 OS Pseudomonas alcaligenes.
 XX

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PN WO9964632-A1.
XX
PD 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvilla R, Morgan RD;
PI WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Claim 7a; Page 60; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ4894-Z44980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
SQ Sequence 77 BP; 17 A; 27 C; 18 G; 15 T; 0 U; 0 Other;
Query Match 91.7%; Score 70.6; DB 1; Length 77;
Best Local Similarity 94.8%; Pred. No. 3.1e-09;
Matches 73; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1 ACCTAACACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCC 60
Db 1 ACCTAACACTAGTGTTCGAAGCGCTTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCC 60
Qy 61 TTAACCAAACTAGGC 77
Db 61 TTAACCAAACTAGGC 77
RESULT 14
AAZ88516
ID AAZ88516 standard; DNA; 74 BP.
XX
XX AAZ88516;
AC
XX 16-MAY-2000 (first entry)
DT
DE P. alcaligenes repeat (PAR) element DNA PARf13.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
OS
XX WO9964632-A1.
PN
XX 16-DEC-1999.
PD
XX 11-JUN-1999; 99WO-US013295.
PF

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XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvilla R, Morgan RD;
PI WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Example 1B; Fig 3E; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ88504-Z88521 represent Pseudomonas
CC alcaligenes repeat (PAR) elements described in the method of the
CC invention
XX
SQ Sequence 74 BP; 19 A; 24 C; 16 G; 15 T; 0 U; 0 Other;
Query Match 90.6%; Score 69.8; DB 1; Length 74;
Best Local Similarity 97.3%; Pred. No. 4.2e-09;
Matches 71; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 3 CTAAACACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
Db 1 CTAAACAAATGGTTCAAGCCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
Qy 63 AACCAACGTTAG 75
Db 61 AACCAACGTTAG 73
RESULT 15
AAZ44967
ID AAZ44967 standard; DNA; 77 BP.
XX
XX AAZ44967;
AC
XX 16-MAY-2000 (first entry)
DT
DE P. alcaligenes repeat (PAR) element DNA #74.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
OS
XX WO9964632-A1.
PN
XX 16-DEC-1999.
PD
XX 11-JUN-1999; 99WO-US013295.
PF
XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
PA

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XX PI Raleigh EA, Vaisvila R, Morgan RD;
 XX DR WPI; 2000-116558/10.
 XX PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX PS Claim 7a; Page 61; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (1), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX SQ Sequence 77 BP; 19 A; 25 C; 17 G; 16 T; 0 U; 0 Other;
 Query Match 90.6%; Score 69.8; DB 1; Length 77;
 Best Local Similarity 97.3%; Pred. No. 4.4e-09;
 Matches 71; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 CTAAACACTGGTTCAAGTCGTTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
 DB 3 CTAAACAAATGGTTCAAGCGGTTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
 QY 63 AACCAACGCTTAG 75
 DB 63 AACCAACGCTTAG 75
 RESULT 16
 ID AAZ44894 standard; DNA; 77 BP.
 AC AAZ44894;
 XX 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #1.
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 XX WO9964632-A1.
 XX 16-DEC-1999.
 XX 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 XX 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 XX Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-116558/10.

PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 59; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (1), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX SQ Sequence 77 BP; 17 A; 24 C; 18 G; 18 T; 0 U; 0 Other;
 Query Match 90.4%; Score 69.6; DB 1; Length 77;
 Best Local Similarity 94.7%; Pred. No. 4.9e-09;
 Matches 72; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 ACCTAAACAACTGGTTCAAGTCGTTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
 DB 1 ATCTAACAAATGGTTCAAGTCGTTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
 QY 61 TTAACCAACGCTTAGG 76
 DB 61 TTAACCAACGCTTAGG 76
 RESULT 17
 ID AAZ44911 standard; DNA; 77 BP.
 XX AAZ44911;
 XX 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #18.
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 XX WO9964632-A1.
 XX 16-DEC-1999.
 XX 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 XX 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 XX Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-116558/10.
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 59; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention

SQ Sequence 77 BP; 16 A; 28 C; 18 G; 15 T; 0 U; 0 Other;

Query Match 90.4%; Score 69.6; DB 1; Length 77;
Best Local Similarity 94.7%; Pred. No. 4.9e-09;
Matches 72; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CCTAACAACTGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCCGCCCT 61
|||||
Db 2 CCTAACTAGTGGTTCAAGCGCTCGCTTCGCTCACTCGGACCGGCTAAAGCCGCCCT 61
|||||

QY 62 TAACCAACGTTAGGC 77
|||||
Db 62 TAACCAACGTTAGGC 77
|||||

RESULT 18
AAZ88503
ID AAZ88503 standard; DNA; 74 BP.
AC AAZ88503;
DT 16-MAY-2000 (first entry)
DE P. alcaligenes repeat (PAR) element consensus DNA #3.
KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.
XX Pseudomonas alcaligenes.
XX WO9964632-A1.
XX 16-DEC-1999.
XX 11-JUN-1999; 99WO-US013295.
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX (NEWE) NEW ENGLAND BIOLABS INC.
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX Example 1B; Fig 3E; 97pp; English.
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. This sequence represents a Pseudomonas
CC alcaligenes repeat (PAR) element consensus sequence described in the
CC method of the invention

SQ Sequence 74 BP; 16 A; 24 C; 18 G; 16 T; 0 U; 0 Other;

Query Match 89.9%; Score 69.2; DB 1; Length 74;
Best Local Similarity 95.9%; Pred. No. 5.5e-09;
Matches 71; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3 CTAAACAACTGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCCGCCCTT 62
|||||
Db 1 CTAAACAACTGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCCGCCCTT 60
|||||

QY 63 AACCAACGTTAGG 76
|||||
Db 61 AACCAACGTTAGG 74
|||||

RESULT 19
AAZ44910
ID AAZ44910 standard; DNA; 77 BP.
XX AAZ44910;
AC AAZ44910;
DT 16-MAY-2000 (first entry)
DE P. alcaligenes repeat (PAR) element DNA #17.
KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.
XX Pseudomonas alcaligenes.
XX WO9964632-A1.
XX 16-DEC-1999.
XX 11-JUN-1999; 99WO-US013295.
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX (NEWE) NEW ENGLAND BIOLABS INC.
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX Claim 7a; Page 59; 97pp; English.
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 77 BP; 18 A; 27 C; 19 G; 13 T; 0 U; 0 Other;
 SQ

Query Match 89.1%; Score 68.6; DB 1; Length 77;
 Best Local Similarity 94.7%; Pred. No. 7.7e-09;
 Matches 71; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCAAGTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
 |||||
 Db 2 CCTAACAACTGGTTCAAGTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
 |||||

Qy 62 TAACCAAACTGTTAGG 76
 |||||
 Db 62 TAACCAAACTGTTAGG 76
 |||||

RESULT 20
 AAZ44915
 ID AAZ44915 standard; DNA; 77 BP.
 XX
 AC AAZ44915;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA #22.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-Al.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEWE) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 DR WPI; 2000-116558/10.
 XX
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PS Claim 7a; Page 59; 97pp; English.
 XX
 CC This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the

CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 77 BP; 18 A; 25 C; 17 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 89.1%; Score 68.6; DB 1; Length 77;
 Best Local Similarity 94.7%; Pred. No. 7.7e-09;
 Matches 71; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCAAGTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
 |||||
 Db 2 CCTAACAACTGGTTCAAGTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
 |||||

Qy 62 TAACCAAACTGTTAGG 76
 |||||
 Db 62 TAACCAAACTGTTAGG 76
 |||||

RESULT 21
 AAZ44929
 ID AAZ44929 standard; DNA; 77 BP.
 XX
 AC AAZ44929;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA #36.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-Al.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEWE) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 DR WPI; 2000-116558/10.
 XX
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PS Claim 7a; Page 60; 97pp; English.
 XX
 CC This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 77 BP; 18 A; 24 C; 18 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 89.1%; Score 68.6; DB 1; Length 77;
 Best Local Similarity 94.7%; Pred. No. 7.7e-09;
 Matches 71; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61
 Db 2 CCTAACAACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61

Qy 62 TAACCAAAACGTTAGG 76
 Db 62 TAACCAAAACGTTAGG 76

RESULT 22
 AAZ88520
 ID AAZ88520 standard; DNA; 74 BP.
 AC AAZ88520;
 XX
 XX
 XX
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA PARf17.
 XX
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 XX
 XX 16-DEC-1999.
 PD
 XX
 XX 11-JUN-1999; 99WO-US013295.
 PF
 XX
 XX 12-JUN-1998; 98US-0089086P.
 PR
 XX 12-JUN-1998; 98US-0089101P.
 PR
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA
 XX
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 XX WPI; 2000-116558/10.
 DR
 XX
 XX
 PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 XX Example 1B; Fig 3E; 97pp; English.

PS This invention describes a novel method for cloning intact, diversity-selected genes (I) from within gene cassettes (GC) which comprises identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON) to these repeats and amplification to produce DNA fragments containing (I), ligating these fragments into a vector and transforming cells with the vector. This method is used to clone a wide variety of prokaryotic genes that provide a selective advantage under particular conditions, particularly those that encode restriction enzymes (used as reagents in molecular biology); adhesins (for use in coating or for targeting molecules or organisms to particular sites, e.g. for competitive exclusion of a selected pathogen); detoxifying enzymes; toxins that interact with a host, e.g. for synthesis of inhibitors or antagonists of the toxin, or in vaccination, or a modification methyltransferase. Intact genes can be cloned directly with a high probability that the orientation of expression is known in advance and low probability of association with extraneous, possibly toxic, genes. AAZ88504-Z88521 represent Pseudomonas alcaligenes repeat (PAR) elements described in the method of the invention

SQ Sequence 74 BP; 19 A; 23 C; 16 G; 16 T; 0 U; 0 Other;

Query Match 87.8%; Score 67.6; DB 1; Length 74;
 Best Local Similarity 94.6%; Pred. No. 1.1e-08;
 Matches 70; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 3 CTAACAACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62

Db 1 CTAACAACTGGTTAAACCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60

Qy 63 AACCAAAACGTTAGG 76
 Db 61 AACCAAAACGTTAGG 74

RESULT 23
 AAZ44954
 ID AAZ44954 standard; DNA; 77 BP.
 XX
 AC AAZ44954;
 XX
 XX
 DT 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #61.
 XX
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 XX
 XX 16-DEC-1999.
 PD
 XX
 XX 11-JUN-1999; 99WO-US013295.
 PF
 XX
 XX 12-JUN-1998; 98US-0089086P.
 PR
 XX 12-JUN-1998; 98US-0089101P.
 PR
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA
 XX
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 XX WPI; 2000-116558/10.
 DR
 XX
 XX
 PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 XX Claim 7a; Page 60; 97pp; English.

PS This invention describes a novel method for cloning intact, diversity-selected genes (I) from within gene cassettes (GC) which comprises identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON) to these repeats and amplification to produce DNA fragments containing (I), ligating these fragments into a vector and transforming cells with the vector. This method is used to clone a wide variety of prokaryotic genes that provide a selective advantage under particular conditions, particularly those that encode restriction enzymes (used as reagents in molecular biology); adhesins (for use in coating or for targeting molecules or organisms to particular sites, e.g. for competitive exclusion of a selected pathogen); detoxifying enzymes; toxins that interact with a host, e.g. for synthesis of inhibitors or antagonists of the toxin, or in vaccination, or a modification methyltransferase. Intact genes can be cloned directly with a high probability that the orientation of expression is known in advance and low probability of association with extraneous, possibly toxic, genes. AAZ44894-Z44980 represent the Pseudomonas alcaligenes repeat (PAR) elements described in the method of the invention

SQ Sequence 77 BP; 18 A; 25 C; 18 G; 16 T; 0 U; 0 Other;

Query Match 87.0%; Score 67; DB 1; Length 77;
 Best Local Similarity 93.3%; Pred. No. 1.6e-08;
 Matches 70; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 ACCTAACAACTGGTTCAAGTCGTTGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
 Db 1 ATCTAACATGCTGGTTCAAGCCGCTCGCTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60

Qy 61 TTAACCAAAACGTTAG 75
 Db 61 TTAACCAAAACGTTAG 75

```

Db      61 TTAACCAACGTTAG 75
RESULT 24
AAZ44937
ID      AAZ44937 standard; DNA; 77 BP.
XX
AC      AAZ44937;
XX
DT      16-MAY-2000 (first entry)
XX
DE      P. alcaligenes repeat (PAR) element DNA #44.
XX
KW      Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX      detoxifying enzyme; repeat element; PAR; ss.
XX
OS      Pseudomonas alcaligenes.
XX
PN      WO9964632-A1.
XX
PD      16-DEC-1999.
XX
PF      11-JUN-1999; 99WO-US013295.
XX
PR      12-JUN-1998; 98US-0089086P.
XX      12-JUN-1998; 98US-0089101P.
XX
PA      (NEWE ) NEW ENGLAND BIOLABS INC.
XX
PI      Raleigh EA, Vaisvila R, Morgan RD;
XX
WPI; 2000-116558/10.
XX
Cloning intact genes used to isolate genes for restriction enzymes.
XX
Claim 7a; Page 60; 97pp; English.
XX
This invention describes a novel method for cloning intact, diversity-
selected genes (I) from within gene cassettes (GC) which comprises
identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
to these repeats and amplification to produce DNA fragments containing
(I), ligating these fragments into a vector and transforming cells with
the vector. This method is used to clone a wide variety of prokaryotic
genes that provide a selective advantage under particular conditions,
particularly those that encode restriction enzymes (used as reagents in
molecular biology); adhesins (for use in coating or for targeting
molecules or organisms to particular sites, e.g. for competitive
exclusion of a selected pathogen); detoxifying enzymes; toxins that
interact with a host, e.g. for synthesis of inhibitors or antagonists of
the toxin, or in vaccination, or a modification methyltransferase. Intact
genes can be cloned directly with a high probability that the orientation
of expression is known in advance and low probability of association with
extraneous, possibly toxic, genes. AAZ44894-244980 represent the
Pseudomonas alcaligenes repeat (PAR) elements described in the method of
the invention
XX
SQ      Sequence 77 BP; 19 A; 25 C; 17 G; 16 T; 0 U; 0 Other;
Query Match      85.7%; Score 66; DB 1; Length 77;
Best Local Similarity 93.2%; Pred. No. 2.5e-08;
Matches 69; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY      2 CCTAACAACTGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
DB      2 CCTAACAAATGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCT 61
QY      62 TTAACCAACGTTAG 75
DB      62 TTAACCAACGTTAG 75
RESULT 25
AAZ44964
ID      AAZ44964 standard; DNA; 77 BP.
XX
AC      AAZ44964;
XX
DT      16-MAY-2000 (first entry)
XX
DE      P. alcaligenes repeat (PAR) element DNA #71.
XX
KW      Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX      detoxifying enzyme; repeat element; PAR; ss.
XX
OS      Pseudomonas alcaligenes.
XX
PN      WO9964632-A1.
XX
PD      16-DEC-1999.
XX
PF      11-JUN-1999; 99WO-US013295.
XX
PR      12-JUN-1998; 98US-0089086P.
XX      12-JUN-1998; 98US-0089101P.
XX
PA      (NEWE ) NEW ENGLAND BIOLABS INC.
XX
PI      Raleigh EA, Vaisvila R, Morgan RD;
XX
WPI; 2000-116558/10.
XX
Cloning intact genes used to isolate genes for restriction enzymes.
XX
Claim 7a; Page 60; 97pp; English.
XX
This invention describes a novel method for cloning intact, diversity-
selected genes (I) from within gene cassettes (GC) which comprises
identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
to these repeats and amplification to produce DNA fragments containing
(I), ligating these fragments into a vector and transforming cells with
the vector. This method is used to clone a wide variety of prokaryotic
genes that provide a selective advantage under particular conditions,
particularly those that encode restriction enzymes (used as reagents in
molecular biology); adhesins (for use in coating or for targeting
molecules or organisms to particular sites, e.g. for competitive
exclusion of a selected pathogen); detoxifying enzymes; toxins that
interact with a host, e.g. for synthesis of inhibitors or antagonists of
the toxin, or in vaccination, or a modification methyltransferase. Intact
genes can be cloned directly with a high probability that the orientation
of expression is known in advance and low probability of association with
extraneous, possibly toxic, genes. AAZ44894-244980 represent the
Pseudomonas alcaligenes repeat (PAR) elements described in the method of
the invention
XX
SQ      Sequence 77 BP; 19 A; 23 C; 17 G; 18 T; 0 U; 0 Other;
Query Match      85.2%; Score 65.6; DB 1; Length 77;
Best Local Similarity 94.4%; Pred. No. 3e-08;
Matches 68; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      4 TAAACAACTGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 63
DB      4 TAAACAAATGGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 63
QY      64 ACCAAACGTTAG 75
DB      64 ACCAAACGTTAG 75
RESULT 26
AAZ88521
ID      AAZ88521 standard; DNA; 73 BP.
XX
AC      AAZ88521;
XX
DT      16-MAY-2000 (first entry)

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XX DE P. alcaligenes repeat (PAR) element DNA PARf18.
XX OS
XX XX
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX XX
XX PD 16-DEC-1999.
XX XX
XX PF 11-JUN-1999; 99WO-US013295.
XX XX
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX XX
XX PA (NEW) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX XX
XX DR WPI; 2000-116558/10.
XX XX
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS
XX XX
XX CC This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX SQ Sequence 73 BP; 17 A; 24 C; 16 G; 16 T; 0 U; 0 Other;
Query Match 81.0%; Score 62.4; DB 1; Length 73;
Best Local Similarity 91.7%; Pred. No. 1.2e-07;
Matches 66; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 3 CTAACAACCTGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
Db 1 CTAACAACCTGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAATTCGGCCCTT 60
QY 63 AACCAACGTTA 74
Db 61 AGCAACGTTA 72
RESULT 27
AA288508
ID AA288508 standard; DNA; 75 BP.
XX AC
XX AC AA288508;
XX DT
XX DT 16-MAY-2000 (first entry)
XX DE
XX DE P. alcaligenes repeat (PAR) element DNA PARf5.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.

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XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX XX
XX PD 16-DEC-1999.
XX XX
XX PF 11-JUN-1999; 99WO-US013295.
XX XX
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX XX
XX PA (NEW) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX XX
XX DR WPI; 2000-116558/10.
XX XX
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS
XX XX
XX CC This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX SQ Sequence 75 BP; 18 A; 23 C; 17 G; 17 T; 0 U; 0 Other;
Query Match 78.3%; Score 60.3; DB 1; Length 75;
Best Local Similarity 96.0%; Pred. No. 3.3e-07;
Matches 72; Conservative 0; Mismatches 2; Indels 1; Gaps 1;
QY 3 CTAACAACCTGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61
Db 1 CTAACAACCTGTTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
QY 62 TAACCAACGTTAGG 76
Db 61 TAACCAACGTTAGG 75
RESULT 28
AA288509
ID AA288509 standard; DNA; 74 BP.
XX AC
XX AC AA288509;
XX DT
XX DT 16-MAY-2000 (first entry)
XX DE
XX DE P. alcaligenes repeat (PAR) element DNA PARf6.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.

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PD 16-DEC-1999.
XX
PF 11-JUN-1999; 99WO-US013295.
XX
PR 12-JUN-1998; 98US-0089086P.
XX
PR 12-JUN-1998; 98US-0089101P.
XX
PA (NEW) NEW ENGLAND BIOLABS INC.
XX
PI Raleigh EA, Vaisvila R, Morgan RD;
XX
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Example 1B; Fig 3E; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX alcaligenes repeat (PAR) elements described in the method of the
XX invention
XX
XX Sequence 74 BP; 13 A; 26 C; 17 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 75.3%; Score 58; DB 1; Length 74;
XX Best Local Similarity 86.5%; Pred. No. 9.2e-07;
XX Matches 64; Conservative 0; Mismatches 10; Indels 0; Gaps 0;
XX
XX 3 CTAACAACTGGTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 62
XX 1 CTAACAACTGGTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
XX
XX 63 AACCAAACTTAGG 76
XX 61 AACCAAACTTAGG 74
XX
XX RESULT 29
XX AAZ88514
XX ID AAZ88514 standard; DNA; 75 BP.
XX
XX AAZ88514;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA PAR11.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEW) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX
XX 12-JUN-1998; 98US-0089086P.

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PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEW) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Example 1B; Fig 3E; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX alcaligenes repeat (PAR) elements described in the method of the
XX invention
XX
XX Sequence 75 BP; 16 A; 23 C; 19 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 74.2%; Score 57.1; DB 1; Length 75;
XX Best Local Similarity 93.3%; Pred. No. 1.4e-06;
XX Matches 70; Conservative 0; Mismatches 4; Indels 1; Gaps 1;
XX
XX 3 CTAACAACTGGTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 61
XX 1 CTAACAACTGGTCAAGTCGTTTCGCTCACTCGGACCGGCTAAAGCGGCCCTT 60
XX
XX 62 TAACCAAACTTAGG 76
XX 61 TAACCAAACTTAGG 75
XX
XX RESULT 30
XX AAZ44901
XX ID AAZ44901 standard; DNA; 76 BP.
XX
XX AAZ44901;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #8.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEW) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;

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XX WPI; 2000-116558/10.
DR
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Claim 7a; Page 59; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
XX Sequence 76 BP; 15 A; 25 C; 20 G; 16 T; 0 U; 0 Other;
SQ
Query Match 74.2%; Score 57.1; DB 1; Length 76;
Best Local Similarity 93.3%; Pred. No. 1.4e-06;
Matches 70; Conservative 0; Mismatches 4; Indels 1; Gaps 1;
QY 2 CCTAACAACTGGTTCAGTCGTTGCTCGTCTACTCGGACCGGCTAAAGCCGGCCCT 61
DB 2 CCTAACAACTGGTTCAGTCGTTGCTCGTCTACTCGGACCGGCG-AAAGCCGGCCCT 60
QY 62 TAACCAACGTTAGG 76
DB 61 TAGCCAAACGTTAGG 75
RESULT 31
AAZ44961
ID AAZ44961 standard; DNA; 76 BP.
XX
XX AAZ44961;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #68.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX

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PS Claim 7a; Page 60; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
XX Sequence 76 BP; 20 A; 22 C; 16 G; 18 T; 0 U; 0 Other;
SQ
Query Match 73.4%; Score 56.5; DB 1; Length 76;
Best Local Similarity 92.1%; Pred. No. 1.9e-06;
Matches 70; Conservative 0; Mismatches 5; Indels 1; Gaps 1;
QY 1 ACCTAACAACTGGTTCAGTCGTTGCTCGTCTACTCGGACCGGCTAAAGCCGGCCCT 60
DB 1 ATCTAACAACTGGTTCAGTCGTTGCTCGTCTACTCGGACCGGCTAAAGCCGGCCCT 59
QY 61 TTAACCAACGTTAGG 76
DB 60 TTAACCAACGTTAGG 75
RESULT 32
AAZ44903
ID AAZ44903 standard; DNA; 76 BP.
XX
XX AAZ44903;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #10.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Claim 7a; Page 59; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

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CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

SQ Sequence 76 BP; 16 A; 25 C; 18 G; 17 T; 0 U; 0 Other;
 Query Match 72.6%; Score 55.9; DB 1; Length 76;
 Best Local Similarity 90.9%; Pred. No. 2.5e-06;
 Matches 70; Conservative 0; Mismatches 6; Indels 1; Gaps 1;

Qy 1 ACCTAACAACTGGTTCAGTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGGCCCC 60
 Db 1 ATCTAACAACTGGTTCAGTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGGCCCC 59

Qy 61 TTAACCAAACTGTTAGG 77
 Db 60 TTAGCCAAACGTTATGC 76

RESULT 35
 AAZ44914
 ID AAZ44914 standard; DNA; 76 BP.

XX AC AAZ44914;

XX DT 16-MAY-2000 (first entry)

XX DE P. alcaligenes repeat (PAR) element DNA #21.

XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 XX detoxifying enzyme; repeat element; PAR; ss.

XX OS Pseudomonas alcaligenes.

XX PN WO9964632-A1.

XX PD 16-DEC-1999.

XX PF 11-JUN-1999; 99WO-US013295.

XX PR 12-JUN-1998; 98US-0089086P.

XX PR 12-JUN-1998; 98US-0089101P.

XX PA (NEWE) NEW ENGLAND BIOLABS INC.

XX PI Raleigh EA, Vaisvila R, Morgan RD;

XX DR WPI; 2000-116558/10.

XX PT Cloning intact genes used to isolate genes for restriction enzymes.

XX PS Claim 7a; Page 59; 97pp; English.

XX CC This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX SQ Sequence 76 BP; 16 A; 25 C; 18 G; 17 T; 0 U; 0 Other;
 Query Match 72.1%; Score 55.5; DB 1; Length 76;
 Best Local Similarity 92.0%; Pred. No. 3e-06;
 Matches 69; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

Qy 2 CCTAACAACTGGTTCAGTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGGCCCCCT 61
 Db 2 CCTAACAACTGGTTCAGTTCGCTTCGCTCACTCGGACCGGCTAAAGCGGGCCCCCT 60

Qy 62 TTAACCAAACTGTTAGG 76
 Db 61 TTAGCCAAACGTTAGG 75

RESULT 36
 AAZ44962
 ID AAZ44962 standard; DNA; 76 BP.

XX AC AAZ44962;

XX DT 16-MAY-2000 (first entry)

XX DE P. alcaligenes repeat (PAR) element DNA #69.

XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 XX detoxifying enzyme; repeat element; PAR; ss.

XX OS Pseudomonas alcaligenes.

XX PN WO9964632-A1.

XX PD 16-DEC-1999.

XX PF 11-JUN-1999; 99WO-US013295.

XX PR 12-JUN-1998; 98US-0089086P.

XX PR 12-JUN-1998; 98US-0089101P.

XX PA (NEWE) NEW ENGLAND BIOLABS INC.

XX PI Raleigh EA, Vaisvila R, Morgan RD;

XX DR WPI; 2000-116558/10.

XX PT Cloning intact genes used to isolate genes for restriction enzymes.

XX PS Claim 7a; Page 60; 97pp; English.

XX CC This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX SQ Sequence 76 BP; 17 A; 24 C; 16 G; 19 T; 0 U; 0 Other;

Query Match 71.9%; Score 55.4; DB 1; Length 76;
 Best Local Similarity 90.8%; Pred. No. 3.1e-06;

Matches 59; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 4 TAACAACTGGTTCAAGTTCGCTTCGCTCACTCGGACCGGCTAAAGCCGGCCCTTA 63
 DB 4 TAACAACTGGTTCAAGTTCGCTTCGCTCACTCGGACCGGCTAAATTCGGCCCTTA 63

QY 64 ACCAA 68
 DB 64 CAA 68

RESULT 37
 AAZ44968
 ID AAZ44968 standard; DNA; 52 BP.
 AC AAZ44968;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA #75.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-Al.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEWE) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 WPI; 2000-116558/10.
 XX
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PT Claim 10; Page 62; 97pp; English.
 XX
 PS This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

Sequence 52 BP; 11 A; 19 C; 12 G; 10 T; 0 U; 0 Other;

Query Match 52.6%; Score 40.5; DB 1; Length 52;
 Best Local Similarity 98.1%; Pred. No. 0.0016; 0; Mismatches 1; Gaps 1;
 Matches 51; Conservative 0

QY 24 TCCTTCGCTCACT-CGGACCGGCTAAAGCCGGCCCTTAACCAACGTTA 74
 DB 1 TCCTTCGCTCACTCGGACCGGCTAAAGCCGGCCCTTAACCAACGTTA 52

RESULT 38
 AAZ44969
 ID AAZ44969 standard; DNA; 43 BP.
 XX
 AC AAZ44969;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA #76.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-Al.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEWE) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 WPI; 2000-116558/10.
 XX
 DR Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PT Claim 10; Page 62; 97pp; English.
 XX
 PS This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

Sequence 43 BP; 8 A; 12 C; 11 G; 12 T; 0 U; 0 Other;

Query Match 43.4%; Score 33.4; DB 1; Length 43;
 Best Local Similarity 86.0%; Pred. No. 0.03; 0; Mismatches 0; Gaps 0;
 Matches 37; Conservative 0

QY 4 TAACAACTGGTTCAAGTTCGCTTCGCTCACTCGGACCGG 46
 DB 1 TAACAACTGGTTCAAGTTCGCTTCGCTCACTCGGACCG 43

RESULT 39
 ADH19155
 ID ADH19155 standard; DNA; 34 BP.
 XX
 AC ADH19155;
 XX
 DT 11-MAR-2004 (first entry)


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PD 16-DEC-1999.
XX
XX
PF 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEW ) NEW ENGLAND BIOLABS INC.
PA
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
PI WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
PT
XX Claim 10; Page 62; 97pp; English.
PS
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
XX Sequence 19 BP; 6 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 24.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. NO. 6.1;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 56 GCCCCTTACCAACGTTA 74
DB 1 GCCCCTTACCAACGTTA 19
XX
XX
XX
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #81.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-Al.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEW ) NEW ENGLAND BIOLABS INC.
PA
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
PI WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
PT
XX Example 1B; Fig 6B; 97pp; English.
PS
XX This invention describes a novel method for cloning intact, diversity-
CC

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PI Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
PT
XX Claim 10; Page 62; 97pp; English.
PS
XX This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
SQ
Query Match 23.9%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. NO. 8.6;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 21 CGTTCGCTTCGCTCACTCGG 40
DB 20 CGTTCGCTTCGCTCACTCGG 1
XX
XX
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element family 2 consensus DNA #3.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; family 2; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-Al.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
XX (NEW ) NEW ENGLAND BIOLABS INC.
PA
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
PI WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
PT
XX Example 1B; Fig 6B; 97pp; English.
PS
XX This invention describes a novel method for cloning intact, diversity-
CC

```


CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 77 BP; 19 A; 25 C; 17 G; 16 T; 0 U; 0 Other;

Query Match 21.3%; Score 16.4; DB 1; Length 77;
 Best Local Similarity 51.4%; Pred. NO. 1.1e-02;
 Matches 38; Conservative 0; Mismatches 36; Indels 0; Gaps 0;

Qy 3 CTAACACTGCTCAAGTCGTTGCTTCGCTCACTCGGACGGCTAAAGCGGCCCTT 62
 Db 75 CTAACGTTTGGTTAAGGGCGCGGCTTAGCCGCTCCGACGAGCGAGTGACTTG 16
 Qy 63 AACCAACGTTAGG 76
 Db 15 AACCATTTGTTAGG 2

RESULT 46
 AA244914/c
 ID AA244914 standard; DNA; 76 BP.

XX AC AA244914;
 XX 16-MAY-2000 (first entry)
 DT DE P. alcaligenes repeat (PAR) element DNA #21.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.

PN WO9964632-A1.
 XX 16-DEC-1999.
 PD PF 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.

PA Raleigh EA, Vaisvila R, Morgan RD;
 PI WPI; 2000-116558/10.

DR Cloning intact genes used to isolate genes for restriction enzymes.

XX Claim 7a; Page 59; 97pp; English.

XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the

CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 76 BP; 16 A; 25 C; 18 G; 17 T; 0 U; 0 Other;
 Query Match 20.5%; Score 15.8; DB 1; Length 76;
 Best Local Similarity 52.2%; Pred. NO. 1.2e+02;
 Matches 35; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 11 TGGTTCAAGTCGTTGCTTCGCTCACTCGGACGGCTAAAGCGGCCCTTAAACCAAC 70
 Db 67 TTGTTAAGGGCGCGGCTATGCCGTCCTCCGACGAGCGAGTGACTTGAACCACTT 8
 Qy 71 GTTAGGC 77
 Db 7 GTTAGGC 1

RESULT 47
 AA244894/c
 ID AA244894 standard; DNA; 77 BP.

XX AC AA244894;
 XX 16-MAY-2000 (first entry)
 DT DE P. alcaligenes repeat (PAR) element DNA #1.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.

PN WO9964632-A1.
 XX 16-DEC-1999.
 PD PF 11-JUN-1999; 99WO-US013295.
 XX 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.

PA Raleigh EA, Vaisvila R, Morgan RD;
 PI WPI; 2000-116558/10.

DR Cloning intact genes used to isolate genes for restriction enzymes.

XX Claim 7a; Page 59; 97pp; English.

XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the

XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention

XX Sequence 77 BP; 17 A; 24 C; 18 G; 18 T; 0 U; 0 Other;

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Query Match      20.5%; Score 15.8; DB 1; Length 77;
Best Local Similarity 50.7%; Pred. No. 1.2e+02;
Matches 38; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

Qy 1 ACCTAACAACTGGTTCAGTCTTCGCTTCGCTCACTCGGACCGGCTAAAGCCGGCCCC 60
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 77 ACCTAACGCTTGGTTAAGGGCCGGCTTTAGCCGGTCCGAGTGAGCGAGCGAGCGACT 18

Qy 61 TTAACCAACGTTAG 75
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 17 TGAACCAATTGTTAG 3

RESULT 48
AAZ44968/c
ID AAZ44968 standard; DNA; 52 BP.
XX AC AAZ44968;
XX XX
XX 16-MAY-2000 (first entry)
XX XX
XX P. alcaligenes repeat (PAR) element DNA #75.
XX XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX XX
XX WO9964632-A1.
XX XX
XX 16-DEC-1999.
XX XX
XX 11-JUN-1999; 99WO-US013295.
XX XX
XX 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX XX
XX WPI; 2000-116558/10.
XX XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX XX
XX Claim 10; Page 62; 97pp; English.
XX XX
XX This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
XX CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX CC the invention
XX XX
SQ Sequence 52 BP; 11 A; 19 C; 12 G; 10 T; 0 U; 0 Other;

Query Match      20.3%; Score 15.6; DB 1; Length 52;
Best Local Similarity 81.8%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTTAAGCCGGCCCC 60
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 58 GGGCCCGGCTTTAGCCGGTCCC 37

RESULT 50
AAZ88515/c
ID AAZ88515 standard; DNA; 74 BP.
XX XX
XX AC AAZ88515;

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Db 38 GGGCCCGGCTTTAGCCGGTCCC 17
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
RESULT 49
AAZ88511/c
ID AAZ88511 standard; DNA; 74 BP.
XX AC AAZ88511;
XX XX
XX 16-MAY-2000 (first entry)
XX XX
XX P. alcaligenes repeat (PAR) element DNA PARf8.
XX XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX XX
XX Pseudomonas alcaligenes.
XX XX
XX WO9964632-A1.
XX XX
XX 16-DEC-1999.
XX XX
XX 11-JUN-1999; 99WO-US013295.
XX PF
XX 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX PA
XX Raleigh EA, Vaisvila R, Morgan RD;
XX PI
XX WPI; 2000-116558/10.
XX DR
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX PT
XX Example 1B; Fig 3E; 97pp; English.
XX PS
XX This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX XX
SQ Sequence 74 BP; 18 A; 23 C; 17 G; 16 T; 0 U; 0 Other;

Query Match      20.3%; Score 15.6; DB 1; Length 74;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTTAAGCCGGCCCC 60
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 58 GGGCCCGGCTTTAGCCGGTCCC 37

RESULT 50
AAZ88515/c
ID AAZ88515 standard; DNA; 74 BP.
XX XX
XX AC AAZ88515;

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XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA PARf12.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PA (NEW) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX DR WPI; 2000-116558/10.
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Example 1B; Fig 3E; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention.
XX SQ Sequence 74 BP; 16 A; 24 C; 17 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 74;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
DB 58 GGGCGCGGCTTTAGCGGTCCT 37

RESULT 51
AA288505/C
ID AA288505 standard; DNA; 74 BP.
XX AC AA288505;
XX XX 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA PARf2.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.

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XX WO9964632-A1.
XX PN 16-DEC-1999.
XX PD 11-JUN-1999; 99WO-US013295.
XX PF 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PR (NEW) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX DR WPI; 2000-116558/10.
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Example 1B; Fig 3E; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention.
XX SQ Sequence 74 BP; 16 A; 25 C; 16 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 74;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
DB 58 GGGCGCGGCTTTAGCGGTCCT 37

RESULT 52
AA288516/C
ID AA288516 standard; DNA; 74 BP.
XX AC AA288516;
XX XX 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA PARf13.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.

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XX PA (NEWWE ) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX PR WPI; 2000-116558/10.
XX DR
XX XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX PS
XX Example 1B; Fig 3E; 97pp; English.
XX CC
XX This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX SQ Sequence 74 BP; 19 A; 24 C; 16 G; 15 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 74;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCCGCCCC 60
DB 58 GGGCCGGCTTAGCCGGTCCC 37

RESULT 53
AAZ88520/c
ID AAZ88520 standard; DNA; 74 BP.
XX AC
XX AAZ88520;
XX DT
XX 16-MAY-2000 (first entry)
XX DE
XX P. alcaligenes repeat (PAR) element DNA PARf17.
XX KW
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS
XX Pseudomonas alcaligenes.
XX XX
XX WO9964632-A1.
XX PN
XX 16-DEC-1999.
XX PD
XX 11-JUN-1999; 99WO-US013295.
XX PF
XX 12-JUN-1998; 98US-0089086P.
XX PR
XX 12-JUN-1998; 98US-0089101P.
XX XX
XX (NEWWE ) NEW ENGLAND BIOLABS INC.
XX PA
XX Raleigh EA, Vaisvila R, Morgan RD;
XX PI
XX WPI; 2000-116558/10.
XX DR
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX PT

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PS Example 1B; Fig 3E; 97pp; English.
XX CC
XX This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX SQ Sequence 74 BP; 19 A; 23 C; 16 G; 16 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 74;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCCGCCCC 60
DB 58 GGGCCGGCTTAGCCGGTCCC 37

RESULT 54
AAZ88508/c
ID AAZ88508 standard; DNA; 75 BP.
XX AC
XX AAZ88508;
XX DT
XX 16-MAY-2000 (first entry)
XX DE
XX P. alcaligenes repeat (PAR) element DNA PARf5.
XX KW
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS
XX Pseudomonas alcaligenes.
XX XX
XX WO9964632-A1.
XX PN
XX 16-DEC-1999.
XX PD
XX 11-JUN-1999; 99WO-US013295.
XX PF
XX 12-JUN-1998; 98US-0089086P.
XX PR
XX 12-JUN-1998; 98US-0089101P.
XX XX
XX (NEWWE ) NEW ENGLAND BIOLABS INC.
XX PA
XX Raleigh EA, Vaisvila R, Morgan RD;
XX PI
XX WPI; 2000-116558/10.
XX DR
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX PT
XX Example 1B; Fig 3E; 97pp; English.
XX CC
XX This invention describes a novel method for cloning intact, diversity-
XX CC selected genes (I) from within gene cassettes (GC) which comprises
XX CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX CC to these repeats and amplification to produce DNA fragments containing
XX CC (I), ligating these fragments into a vector and transforming cells with
XX CC the vector. This method is used to clone a wide variety of prokaryotic
XX CC genes that provide a selective advantage under particular conditions,
XX CC particularly those that encode restriction enzymes (used as reagents in
XX CC molecular biology); adhesins (for use in coating or for targeting
XX CC molecules or organisms to particular sites, e.g. for competitive
XX CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX CC the toxin, or in vaccination, or a modification methyltransferase. Intact
XX CC genes can be cloned directly with a high probability that the orientation
XX CC of expression is known in advance and low probability of association with
XX CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
XX CC alcaligenes repeat (PAR) elements described in the method of the
XX CC invention
XX SQ

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particularly those that encode restriction enzymes (used as reagents in molecular biology); adhesins (for use in coating or for targeting molecules or organisms to particular sites, e.g. for competitive exclusion of a selected pathogen); detoxifying enzymes; toxins that interact with a host, e.g. for synthesis of inhibitors or antagonists of the toxin, or in vaccination, or a modification methyltransferase. Intact genes can be cloned directly with a high probability that the orientation of expression is known in advance and low probability of association with extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas alcaligenes repeat (PAR) elements described in the method of the invention

Sequence 75 BP; 18 A; 23 C; 17 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 75;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTTAAGCGCGGCC 60
 |||||
 DB 59 GGGGCGGCTTACGCGGTCCC 38

RESULT 55
 AA288514/c
 ID AA288514 standard; DNA; 75 BP.
 XX
 AC AA288514;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA PAR11.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-A1.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEW) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 DR WPI; 2000-116558/10.
 XX
 PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PS Example 1B; Fig 3E; 97pp; English.
 XX
 CC This invention describes a novel method for cloning intact, diversity-selected genes (I) from within gene cassettes (GC) which comprises identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON) to these repeats and amplification to produce DNA fragments containing (I), ligating these fragments into a vector and transforming cells with the vector. This method is used to clone a wide variety of prokaryotic genes that provide a selective advantage under particular conditions, particularly those that encode restriction enzymes (used as reagents in molecular biology); adhesins (for use in coating or for targeting molecules or organisms to particular sites, e.g. for competitive exclusion of a selected pathogen); detoxifying enzymes; toxins that interact with a host, e.g. for synthesis of inhibitors or antagonists of the toxin, or in vaccination, or a modification methyltransferase. Intact genes can be cloned directly with a high probability that the orientation of expression is known in advance and low probability of association with extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas

alcaligenes repeat (PAR) elements described in the method of the invention

Sequence 75 BP; 16 A; 23 C; 19 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 75;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTTAAGCGCGGCC 60
 |||||
 DB 59 GGGGCGGCTTACGCGGTCCC 38

RESULT 56
 AA244961/c
 ID AA244961 standard; DNA; 76 BP.
 XX
 AC AA244961;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE P. alcaligenes repeat (PAR) element DNA #68.
 XX
 KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX
 OS Pseudomonas alcaligenes.
 XX
 PN WO9964632-A1.
 XX
 PD 16-DEC-1999.
 XX
 PF 11-JUN-1999; 99WO-US013295.
 XX
 PR 12-JUN-1998; 98US-0089086P.
 PR 12-JUN-1998; 98US-0089101P.
 XX
 PA (NEW) NEW ENGLAND BIOLABS INC.
 XX
 PI Raleigh EA, Vaisvila R, Morgan RD;
 XX
 DR WPI; 2000-116558/10.
 XX
 PT Cloning intact genes used to isolate genes for restriction enzymes.
 XX
 PS Claim 7a; Page 60; 97pp; English.
 XX
 CC This invention describes a novel method for cloning intact, diversity-selected genes (I) from within gene cassettes (GC) which comprises identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON) to these repeats and amplification to produce DNA fragments containing (I), ligating these fragments into a vector and transforming cells with the vector. This method is used to clone a wide variety of prokaryotic genes that provide a selective advantage under particular conditions, particularly those that encode restriction enzymes (used as reagents in molecular biology); adhesins (for use in coating or for targeting molecules or organisms to particular sites, e.g. for competitive exclusion of a selected pathogen); detoxifying enzymes; toxins that interact with a host, e.g. for synthesis of inhibitors or antagonists of the toxin, or in vaccination, or a modification methyltransferase. Intact genes can be cloned directly with a high probability that the orientation of expression is known in advance and low probability of association with extraneous, possibly toxic, genes. AA244894-244980 represent the Pseudomonas alcaligenes repeat (PAR) elements described in the method of the invention

Sequence 76 BP; 20 A; 22 C; 16 G; 18 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 76;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

Qy 39 GGGACCGGCTAAAGCGGCCCC 60
Db 59 GGGCCGGCTTTAGCGGTCCC 38

RESULT 57
AAZ44900/c
ID AAZ44900 standard; DNA; 77 BP.
XX
XX AAZ44900;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #7.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Claim 7a; Page 59; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-Z44980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention
XX
XX Sequence 77 BP; 18 A; 26 C; 17 G; 16 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTAAAGCGGCCCC 60
Db 60 GGGCCGGCTTTAGCGGTCCC 39

RESULT 58
AAZ44913/c
ID AAZ44913 standard; DNA; 77 BP.
XX
XX

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AC AAZ44913;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #20.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Claim 7a; Page 59; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-Z44980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention
XX
XX Sequence 77 BP; 18 A; 25 C; 17 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTAAAGCGGCCCC 60
Db 60 GGGCCGGCTTTAGCGGTCCC 39

RESULT 59
AAZ44952/c
ID AAZ44952 standard; DNA; 77 BP.
XX
XX AAZ44952;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #59.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX

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OS Pseudomonas alcaligenes.
XX
PN WO9964632-A1.
XX
PD 16-DEC-1999.
XX
PF 11-JUN-1999; 99WO-US013295.
XX
PR 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
PA (NEW) NEW ENGLAND BIOLABS INC.
XX
PI Raleigh EA, Vaisvila R, Morgan RD;
XX
DR WPI; 2000-116558/10.
XX
PT Cloning intact genes used to isolate genes for restriction enzymes.
XX
PS Claim 7a; Page 60; 97pp; English.
XX
CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AA244894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
SQ Sequence 77 BP; 18 A; 25 C; 18 G; 16 T; 0 U; 0 Other;
Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
Db 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 60
AA244957/C
ID AA244957 standard; DNA; 77 BP.
XX
AC AA244957;
XX
DT 16-MAY-2000 (first entry)
XX
DE P. alcaligenes repeat (PAR) element DNA #64.
XX
KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
OS Pseudomonas alcaligenes.
XX
PN WO9964632-A1.
XX
PD 16-DEC-1999.
XX
PF 11-JUN-1999; 99WO-US013295.
XX
PR 12-JUN-1998; 98US-0089086P.
XX
PT Cloning intact genes used to isolate genes for restriction enzymes.

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PR 12-JUN-1998; 98US-0089101P.
XX
PA (NEW) NEW ENGLAND BIOLABS INC.
XX
PI Raleigh EA, Vaisvila R, Morgan RD;
XX
DR WPI; 2000-116558/10.
XX
PT Cloning intact genes used to isolate genes for restriction enzymes.
XX
PS Claim 7a; Page 60; 97pp; English.
XX
CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AA244894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
SQ Sequence 77 BP; 16 A; 26 C; 18 G; 17 T; 0 U; 0 Other;
Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
Db 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 61
AA244987/C
ID AA244987 standard; DNA; 77 BP.
XX
AC AA244987;
XX
DT 16-MAY-2000 (first entry)
XX
DE P. alcaligenes repeat (PAR) element family 1 consensus DNA #3.
XX
KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; family 1; ss.
XX
OS Pseudomonas alcaligenes.
XX
PN WO9964632-A1.
XX
PD 16-DEC-1999.
XX
PF 11-JUN-1999; 99WO-US013295.
XX
PR 12-JUN-1998; 98US-0089086P.
PR 12-JUN-1998; 98US-0089101P.
XX
PA (NEW) NEW ENGLAND BIOLABS INC.
XX
PI Raleigh EA, Vaisvila R, Morgan RD;
XX
DR WPI; 2000-116558/10.
XX
PT Cloning intact genes used to isolate genes for restriction enzymes.

```

XX Example 1B; Fig 6A; 97pp; English.

PS This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises

CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

CC to these repeats and amplification to produce DNA fragments containing

CC (I), ligating these fragments into a vector and transforming cells with

CC the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions,

CC particularly those that encode restriction enzymes (used as reagents in

CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive

CC exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC interact with a host, e.g. for synthesis of inhibitors or antagonists of

CC the toxin, or in vaccination, or a modification methyltransferase. Intact

CC genes can be cloned directly with a high probability of association with

CC of expression is known in advance and low probability of association with

CC extraneous, possibly toxic, genes. AAZ44985-244987 represents Pseudomonas

CC alcaligenes repeat (PAR) element family 1 consensus sequences described

CC in the method of the invention

XX

SQ Sequence 77 BP; 17 A; 26 C; 18 G; 16 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;

Best Local Similarity 81.8%; Pred. No. 1.3e+02;

Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTTAAGCGGCCCC 60

Db 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 62

AAZ44908/c

ID AAZ44908 standard; DNA; 77 BP.

XX

AC AAZ44908;

XX

DT 16-MAY-2000 (first entry)

XX

DE P. alcaligenes repeat (PAR) element DNA #15.

XX

KW Diversity-selected gene; restriction enzyme; adhesin; toxin;

KW detoxifying enzyme; repeat element; PAR; ss.

XX

OS Pseudomonas alcaligenes.

XX

FN WO9964632-A1.

XX

PD 16-DEC-1999.

XX

PF 11-JUN-1999; 99WO-US013295.

XX

PR 12-JUN-1998; 98US-0089086P.

PR 12-JUN-1998; 98US-0089101P.

XX

FA (NEW) NEW ENGLAND BIOLABS INC.

XX

PI Raleigh EA, Vaisvila R, Morgan RD;

XX

DR WPI; 2000-116558/10.

XX

PT Cloning intact genes used to isolate genes for restriction enzymes.

XX

PS Claim 7a; Page 59; 97pp; English.

XX

CC This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises

CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

CC to these repeats and amplification to produce DNA fragments containing

CC (I), ligating these fragments into a vector and transforming cells with

CC the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions,

CC particularly those that encode restriction enzymes (used as reagents in

CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive

CC exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC interact with a host, e.g. for synthesis of inhibitors or antagonists of

CC the toxin, or in vaccination, or a modification methyltransferase. Intact

CC genes can be cloned directly with a high probability of association with

CC of expression is known in advance and low probability of association with

CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the

CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of

CC the invention

XX

SQ Sequence 77 BP; 18 A; 26 C; 17 G; 16 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;

Best Local Similarity 81.8%; Pred. No. 1.3e+02;

Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTTAAGCGGCCCC 60

Db 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 63

AAZ44944/c

ID AAZ44944 standard; DNA; 77 BP.

XX

AC AAZ44944;

XX

DT 16-MAY-2000 (first entry)

XX

DE P. alcaligenes repeat (PAR) element DNA #51.

XX

KW Diversity-selected gene; restriction enzyme; adhesin; toxin;

KW detoxifying enzyme; repeat element; PAR; ss.

XX

OS Pseudomonas alcaligenes.

XX

FN WO9964632-A1.

XX

PD 16-DEC-1999.

XX

PF 11-JUN-1999; 99WO-US013295.

XX

PR 12-JUN-1998; 98US-0089086P.

PR 12-JUN-1998; 98US-0089101P.

XX

FA (NEW) NEW ENGLAND BIOLABS INC.

XX

PI Raleigh EA, Vaisvila R, Morgan RD;

XX

DR WPI; 2000-116558/10.

XX

PT Cloning intact genes used to isolate genes for restriction enzymes.

XX

PS Claim 7a; Page 60; 97pp; English.

XX

CC This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises

CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

CC to these repeats and amplification to produce DNA fragments containing

CC (I), ligating these fragments into a vector and transforming cells with

CC the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions,

CC particularly those that encode restriction enzymes (used as reagents in

CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive

CC exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC interact with a host, e.g. for synthesis of inhibitors or antagonists of

CC the toxin, or in vaccination, or a modification methyltransferase. Intact

CC genes can be cloned directly with a high probability of association with

CC of expression is known in advance and low probability of association with

CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX
 XX SQ Sequence 77 BP; 16 A; 26 C; 16 G; 19 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
 ||| ||||| ||||| ||||| |||||
 DB 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 64

AAZ44966/c

ID AAZ44966 standard; DNA; 77 BP.

XX AC AAZ44966;

XX DT 16-MAY-2000 (first entry)

XX DE P. alcaligenes repeat (PAR) element DNA #73.

XX XX Diversity-selected gene; restriction enzyme; adhesin; toxin;

KW detoxifying enzyme; repeat element; PAR; ss.

XX OS Pseudomonas alcaligenes.

XX PN WO9964632-A1.

XX PD 16-DEC-1999.

XX PF 11-JUN-1999; 99WO-US013295.

XX PR 12-JUN-1998; 98US-0089086P.

XX PR 12-JUN-1998; 98US-0089101P.

XX XX (NEWE) NEW ENGLAND BIOLABS INC.

XX PI Raleigh EA, Vaisvila R, Morgan RD;

XX XX WPI; 2000-116558/10.

XX XX Cloning intact genes used to isolate genes for restriction enzymes.

XX PS Claim 7a; Page 61; 97pp; English.

XX CC This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises

CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

CC to these repeats and amplification to produce DNA fragments containing

CC (I), ligating these fragments into a vector and transforming cells with

CC the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions, in

CC particularly those that encode restriction enzymes (used as reagents, in

CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive

CC exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC the toxin, or in vaccination, or a modification methyltransferase. Intact

CC genes can be cloned directly with a high probability that the orientation

CC of expression is known in advance and low probability of association with

CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the

CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of

CC the invention

XX SQ Sequence 77 BP; 19 A; 26 C; 17 G; 15 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;

Best Local Similarity 81.8%; Pred. No. 1.3e+02;

Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60

||| ||||| ||||| ||||| |||||

DB 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 66
 AAZ44967/c
 ID AAZ44967 standard; DNA; 77 BP.

QY 39 GGGACCGGCTAAAGCGGCCCC 60
 ||| ||||| ||||| ||||| |||||
 DB 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 65

AAZ44930/c

ID AAZ44930 standard; DNA; 77 BP.

XX AC AAZ44930;

XX DT 16-MAY-2000 (first entry)

XX DE P. alcaligenes repeat (PAR) element DNA #37.

XX XX Diversity-selected gene; restriction enzyme; adhesin; toxin;

KW detoxifying enzyme; repeat element; PAR; ss.

XX OS Pseudomonas alcaligenes.

XX PN WO9964632-A1.

XX PD 16-DEC-1999.

XX PF 11-JUN-1999; 99WO-US013295.

XX PR 12-JUN-1998; 98US-0089086P.

XX PR 12-JUN-1998; 98US-0089101P.

XX XX (NEWE) NEW ENGLAND BIOLABS INC.

XX PI Raleigh EA, Vaisvila R, Morgan RD;

XX XX WPI; 2000-116558/10.

XX XX Cloning intact genes used to isolate genes for restriction enzymes.

XX PS Claim 7a; Page 60; 97pp; English.

XX CC This invention describes a novel method for cloning intact, diversity-

CC selected genes (I) from within gene cassettes (GC) which comprises

CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)

CC to these repeats and amplification to produce DNA fragments containing

CC (I), ligating these fragments into a vector and transforming cells with

CC the vector. This method is used to clone a wide variety of prokaryotic

CC genes that provide a selective advantage under particular conditions, in

CC particularly those that encode restriction enzymes (used as reagents, in

CC molecular biology); adhesins (for use in coating or for targeting

CC molecules or organisms to particular sites, e.g. for competitive

CC exclusion of a selected pathogen); detoxifying enzymes; toxins that

CC the toxin, or in vaccination, or a modification methyltransferase. Intact

CC genes can be cloned directly with a high probability that the orientation

CC of expression is known in advance and low probability of association with

CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the

CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of

CC the invention

XX SQ Sequence 77 BP; 17 A; 27 C; 18 G; 15 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;

Best Local Similarity 81.8%; Pred. No. 1.3e+02;

Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60

||| ||||| ||||| ||||| |||||

DB 60 GGGCGCGCTTTAGCGGTCCC 39

RESULT 66

AAZ44967/c

ID AAZ44967 standard; DNA; 77 BP.

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XX AC AAZ44967;
XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA #74.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX DR WPI; 2000-116558/10.
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Claim 7a; Page 61; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX SQ Sequence 77 BP; 19 A; 25 C; 17 G; 16 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTAAAGCCGCCCC 60
   ||| ||||| ||||| ||||| |||
Db 60 GGGCCCGGCTTTAGCCGGTCCC 39

RESULT 67
AAZ44911/c
ID AAZ44911 standard; DNA; 77 BP.
XX AC AAZ44911;
XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA #19.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.

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XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX DR WPI; 2000-116558/10.
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Claim 7a; Page 59; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ44894-244980 represent the
CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX SQ Sequence 77 BP; 16 A; 28 C; 18 G; 15 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 39 GGGACCGGCTAAAGCCGCCCC 60
   ||| ||||| ||||| ||||| |||
Db 60 GGGCCCGGCTTTAGCCGGTCCC 39

RESULT 68
AAZ44910/c
ID AAZ44910 standard; DNA; 77 BP.
XX AC AAZ44910;
XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA #17.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-A1.
XX PD 16-DEC-1999.
XX PR 11-JUN-1999; 99WO-US013295.

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PR 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX (NEW ) NEW ENGLAND BIOLABS INC.
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX Claim 7a; Page 59; 97pp; English.
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-244980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention
XX Sequence 77 BP; 18 A; 27 C; 19 G; 13 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAGCGCGGCC 60
DB 60 GGGCGCGGCTTTAGCGGTC 39

RESULT 69
AAZ44915/c
ID AAZ44915 standard; DNA; 77 BP.
XX AAZ44915;
XX 16-MAY-2000 (first entry)
XX P. alcaligenes repeat (PAR) element DNA #22.
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX Pseudomonas alcaligenes.
XX WO9964632-A1.
XX 16-DEC-1999.
XX 11-JUN-1999; 99WO-US013295.
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX (NEW ) NEW ENGLAND BIOLABS INC.
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX

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PT Cloning intact genes used to isolate genes for restriction enzymes.
XX Claim 7a; Page 59; 97pp; English.
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-244980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention
XX Sequence 77 BP; 18 A; 25 C; 17 G; 17 T; 0 U; 0 Other;

Query Match 20.3%; Score 15.6; DB 1; Length 77;
Best Local Similarity 81.8%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAGCGCGGCC 60
DB 60 GGGCGCGGCTTTAGCGGTC 39

RESULT 70
AAZ44929/c
ID AAZ44929 standard; DNA; 77 BP.
XX AAZ44929;
XX 16-MAY-2000 (first entry)
XX P. alcaligenes repeat (PAR) element DNA #36.
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX Pseudomonas alcaligenes.
XX WO9964632-A1.
XX 16-DEC-1999.
XX 11-JUN-1999; 99WO-US013295.
XX 12-JUN-1998; 98US-0089086P.
XX 12-JUN-1998; 98US-0089101P.
XX (NEW ) NEW ENGLAND BIOLABS INC.
XX Raleigh EA, Vaisvila R, Morgan RD;
XX WPI; 2000-116558/10.
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX Claim 7a; Page 60; 97pp; English.
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-244980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention
XX Sequence 77 BP; 18 A; 25 C; 17 G; 17 T; 0 U; 0 Other;

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CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX Sequence 77 BP; 18 A; 24 C; 18 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 20.3%; Score 15.6; DB 1; Length 77;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 39 GGGACCGGCTTAAAGCGGCCCC 60
 ||| ||||| ||||| ||||| |||||
 Db 60 GGGCGCGCTTTAGCCGCTCCC 39
 RESULT 71
 AA244954/c
 ID AA244954 standard; DNA; 77 BP.
 AC AA244954;
 XX
 DT 16-MAY-2000 (first entry)
 DE
 XX P. alcaligenes repeat (PAR) element DNA #61.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 XX
 XX 16-DEC-1999.
 XX
 XX 11-JUN-1999; 99WO-US013295.
 XX
 XX 12-JUN-1998; 98US-0089086P.
 XX 12-JUN-1998; 98US-0089101P.
 XX
 XX (NEW) NEW ENGLAND BIOLABS INC.
 XX
 XX Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-116558/10.
 XX
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 60; 97pp; English.
 XX
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation

CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX Sequence 77 BP; 18 A; 25 C; 18 G; 16 T; 0 U; 0 Other;
 SQ
 Query Match 20.3%; Score 15.6; DB 1; Length 77;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 39 GGGACCGGCTTAAAGCGGCCCC 60
 ||| ||||| ||||| ||||| |||||
 Db 60 GGGCGCGCTTTAGCCGCTCCC 39
 RESULT 72
 AA244964/c
 ID AA244964 standard; DNA; 77 BP.
 XX AA244964;
 AC
 XX
 DT 16-MAY-2000 (first entry)
 DE
 XX P. alcaligenes repeat (PAR) element DNA #71.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS
 XX WO9964632-A1.
 XX
 XX 16-DEC-1999.
 XX
 XX 11-JUN-1999; 99WO-US013295.
 XX
 XX 12-JUN-1998; 98US-0089086P.
 XX 12-JUN-1998; 98US-0089101P.
 XX
 XX (NEW) NEW ENGLAND BIOLABS INC.
 XX
 XX Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-116558/10.
 XX
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 7a; Page 60; 97pp; English.
 XX
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AA244894-244980 represent the
 CC Pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX Sequence 77 BP; 19 A; 23 C; 17 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 20.3%; Score 15.6; DB 1; Length 77;
 Best Local Similarity 81.8%; Pred. No. 1.3e+02;

KW chromosome 4q; chromosome 5q; chromosome 6q; chromosome 8p;
 KW chromosome 9p; chromosome 9q; chromosome 10q; chromosome 11q;
 KW chromosome 11p; chromosome 13q; chromosome 14q; chromosome 16q;
 KW chromosome 17p; chromosome 18q.

OS Homo sapiens.

PN WO20003072823-A2.

XX 04-SEP-2003.

XX 25-FEB-2003; 2003WO-FR000609.

XX 25-FEB-2002; 2002FR-00002380.

XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

XX GrandChamp B, Mentre F;

XX WPI; 2003-697769/66.

XX In vitro detection of tumor cells, in a biological sample, uses a
 PT highlight of allelic imbalance in insertion-deletion chromosome markers.
 XX Claim 15; SEQ ID NO 41; 51pp; French.

XX The invention relates to a method of in vitro detection of cancer tumor
 CC cells, in a biological sample, where allelic imbalances are highlighted
 CC in insertion-deletion chromosome markers. The markers are given a
 CC quantitative multiplex amplification by polymerase chain reaction (PCR),
 CC triggered by heat. A calculation is made of a global statistical score
 CC for all the markers being studied, for comparison with a fixed normal
 CC threshold. The technique is especially for the detection of bladder tumor
 CC cells in a urine sample, using a blood sample as the reference. The non-
 CC invasive method gives evidence of an allelic imbalance with at least 15
 CC chromosome insertion-deletion markers and preferably 18, or at least 30
 CC or at least 40 markers. This sequence represents a primer used in the
 CC method of the invention.

XX SQ Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 17.9%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 62;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 47 CTAAGCGCGCCCTTA 63

Db 19 CTAAGCGCAGCCCAT 3

RESULT 76

AAF51766

ID AAF51766 standard; DNA; 15 BP.

XX AAF51766;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #2726.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

OS WO200078341-A1.

XX

PD 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wraight CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX Example 8; Page 78; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 4 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 17.4%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 53;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 42 ACCGGCTAAAGCCGG 56

Db 1 ACCGGCTAAAGCCGG 15

RESULT 77

AAF52743

ID AAF52743 standard; DNA; 15 BP.

XX AAF52743;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #3703.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

OS WO200078341-A1.

PN 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX

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PR 21-JUN-1999; 99US-0140345P.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX Wraight CJ, Werther GA, Edmondson SR;
XX WPI, 2001-041421/05.
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX Example 8; Page 85; 201pp; English.
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
SQ Query Match 17.4%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 53;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 16 CAAGTCGTCGCTTC 30
Db 1 CAAGTCCTCGCTTC 15

RESULT 78
AAF52744
ID AAF52744 standard; DNA; 15 BP.
XX AC AAF52744;
XX AC AAF52744;
XX DT 30-MAR-2001 (first entry)
XX DE IGF-I oligonucleotide #3704.
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX Homo sapiens.
XX WO200078341-A1.
XX 28-DEC-2000.
XX 21-JUN-2000; 2000WO-AU000693.
XX 21-JUN-1999; 99US-0140345P.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX

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PI Wraight CJ, Werther GA, Edmondson SR;
XX WPI, 2001-041421/05.
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX Example 8; Page 85; 201pp; English.
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
SQ Query Match 17.4%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 53;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 17 AAGTCGTCGCTTCG 31
Db 1 AAGTCCTCGCTTCG 15

RESULT 79
AAA79810/C
ID AAA79810 standard; DNA; 17 BP.
XX AC AAA79810;
XX AC AAA79810;
XX DT 20-NOV-2000 (first entry)
XX DE Hepatitis B virus related oligonucleotide probe #73.
XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
XX mutation; high-density gene chip; ss.
XX Hepatitis B virus.
XX CN1252452-A.
XX 10-MAY-2000.
XX 24-SEP-1999; 99CN-00114460.
XX 24-SEP-1999; 99CN-00114460.
XX (UYDO-) UNIV DONGNAN.
XX Sun X, Lu Z, Wang Y;
XX WPI, 2000-443233/39.
XX High-density gene chip making process.
XX Example 1; Fig 15; 19pp; Chinese.
XX The present invention describes a method which comprises making a high-
XX density gene chip, specifically for making high-density micro-array of

```

CC oligonucleotide probes. An oligonucleotide probe selecting process to
 CC seek preferentially length variable and coverage variable probes is
 CC provided to ensure identical cross melting temperature of probes to the
 CC maximum limit, and this can make the cross control of gene chip
 CC relatively simple and raise the reliability of the gene chip detecting
 CC results. The process proposes a specific probe selection method for
 CC detecting target sequence directly, detecting mutation in both specific
 CC and non-specific sites and a probe overall arrangement scheme. AAH79738
 CC to AAH80201 represent oligonucleotide probe sequences which are used in
 CC examples from the present invention

XX
 SQ Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 17.4%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 63;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 32 CTCACTCGGGACCG 46
 Db 15 CTCACCTGGGACCG 1
 ||||| |||||

RESULT 80
 AAH40833
 ID AAH40833 standard; DNA; 18 BP.
 XX
 AC AAH40833;
 XX
 DT 14-AUG-2001 (first entry)
 XX
 DE SNP specific upper PCR primer SEQ ID 3629.
 XX
 KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
 KW SNEP; genotyping; agammaglobulinemia; diabetes insipidus; cancer;
 KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
 KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
 KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200129262-A2.
 XX
 PD 26-APR-2001.
 XX
 PF 13-OCT-2000; 2000WO-US028436.
 XX
 PR 15-OCT-1999; 99US-0160096P.
 XX
 PA (ORCH-) ORCHID BIOSCIENCES INC.
 XX
 PI Picoult-Newburg L, Pohl M;
 XX
 DR WPI; 2001-290930/30.
 XX
 PT New genotyping oligonucleotide, useful for detecting the presence,
 PT absence or identity of single polynucleotide polymorphism in a nucleic
 PT acid sample.
 XX
 PS Claim 1; Page 68; 63pp; English.
 XX
 CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
 CC primer extension (SNEP) primers, and the sequences of regions flanking
 CC sites of single nucleotide polymorphisms SNPs. The present invention
 CC includes kits for determining the presence or absence of a SNP, using the
 CC oligonucleotides of the invention. The PCR primers are used to amplify a
 CC SNP flanking sequence, the SNEP primer is used as a genotyping primer.
 CC The oligonucleotides are useful for genotyping a nucleic acid sample by
 CC performing a single-nucleotide primer extension reaction. The
 CC oligonucleotides are useful for determining the presence, absence or
 CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
 CC assess by association analysis the genotype of an individual or group of
 CC individuals, having a pathological phenotypic trait suspected of being

CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
 CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
 CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
 CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
 CC traits also include symptoms of or susceptibility to multifactorial
 CC disease of which a component is or may be genetic such as autoimmune
 CC diseases, including, rheumatoid arthritis, multiple sclerosis,
 CC inflammation, cancer, nervous system diseases and infection by pathogenic
 CC microorganism. The method is also useful in forensic investigations and
 CC paternity analysis. The present sequence represents a PCR primer specific
 CC for a human SNP containing DNA sequence

XX
 SQ Sequence 18 BP; 5 A; 8 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 17.4%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 69;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 30 CGCTCACTCGGGACC 44
 Db 1 CGCACACTCGGGACC 15
 ||||| |||||

RESULT 81
 ADE43414
 ID ADE43414 standard; DNA; 18 BP.
 XX
 AC ADE43414;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human SNCG sequencing primer, SEQ ID 19.
 XX
 KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;
 KW Alzheimer's disease; neuroprotective; nootropic; gene therapy;
 KW Chromosome 10; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO2003054143-A2.
 XX
 PD 03-JUL-2003.
 XX
 PF 25-OCT-2002; 2002WO-US034679.
 XX
 PR 25-OCT-2001; 2001US-0339525P.
 PR 08-NOV-2001; 2001US-0336929P.
 PR 08-NOV-2001; 2001US-0338010P.
 PR 09-NOV-2001; 2001US-0338363P.
 PR 04-DEC-2001; 2001US-0337052P.
 PR 28-MAR-2002; 2002US-0368919P.
 XX
 PA (NEUR-) NEUROGENETICS INC.
 PA (GEHO) GEN HOSPITAL CORP.
 XX
 PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;
 PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DJ;
 XX
 DR WPI; 2003-559131/52.
 XX
 PT Determining a predisposition for or the occurrence of neurodegenerative
 PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
 PT the presence or absence of an allelic variant of one or more polymorphic
 PT regions.
 XX
 PS Example 2; Page 265; 848pp; English.
 XX
 CC The present invention relates to a method (M1) for determining a
 CC predisposition for or the occurrence of neurodegenerative disease in a
 CC subject. The method comprises detecting in a target nucleic acid obtained
 CC from the subject the presence or absence of an allelic variant of one or
 CC more polymorphic regions of one or more genes selected from uPA
 CC (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-

CC degrading enzyme), KNSLI (Kinesin-like protein 1), LIPA (lysosomal acid
CC lipase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the
CC presence of at least one of the allelic variant of one or more
CC polymorphic regions is indicative of a predisposition for or the
CC occurrence of neurodegenerative disease. The genes are all located on
CC chromosome 10. M1 is useful for determining a predisposition for or the
CC occurrence of, and for treating neurodegenerative disease, particularly
CC Alzheimer's disease. The present sequence is a PCR primer, which was used
CC in the method of the invention.

XX Sequence 18 BP; 5 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
SQ Query Match 17.1%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 75;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 35 ACTCGGACCGGCTAAAG 52
Db 1 ACACGGGAGCGGCTACAG 18

RESULT 82
ADH53892
ID ADH53892 standard; DNA; 18 BP.

XX AC ADH53892;

XX 25-MAR-2004 (first entry)

XX Human neurodegenerative disease-related sequencing primer SeqID19.

XX human; neurodegenerative disease; urokinase plasminogen activator; uPA;
KW gamma-synuclein; SNCG; insulin degrading enzyme; IDE; uPA;
KW kinesin-like protein 1; KNSLI; lysosomal acid lipase; LIPA;
KW tumour necrosis factor receptor SF6; TNFRSF6; Alzheimer's disease; PCR;
KW primer; ss; sequencing.

XX Homo sapiens.

XX US2003224380-A1.

XX 04-DEC-2003.

XX 25-OCT-2002; 2002US-00282174.

XX 25-OCT-2001; 2001US-0339525P.

XX 25-OCT-2001; 2001US-0348065P.

XX 02-NOV-2001; 2001US-0336983P.

XX 08-NOV-2001; 2001US-0336929P.

XX 08-NOV-2001; 2001US-0338010P.

XX 09-NOV-2001; 2001US-0338363P.

XX 04-DEC-2001; 2001US-0337052P.

XX 28-MAR-2002; 2002US-0368919P.

XX (GEO) GEN HOSPITAL CORP.

XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE;

XX Bertram L, Saunders AJ, Mullin KM, Sampson AJ;

XX WPI; 2004-060538/06.

XX Determining a predisposition for or the occurrence of neurodegenerative
XX disease, particularly Alzheimer's disease, comprises determining the
XX presence of a polymorphism in the uPA, SNCG, IDE, KNSLI, LIPA or TNFRSF6
XX Gene.
XX Example 2; SEQ ID NO 19; 205pp; English.
XX This invention relates to a novel method of determining a predisposition
XX for or the occurrence of neurodegenerative disease comprising detecting
XX in a target nucleic acid obtained from the subject the presence of an
XX allelic variant of polymorphic regions of human genes selected from
XX urokinase plasminogen activator (uPA), gamma-synuclein (SNCG), insulin

CC degrading enzyme (IDE), kinesin-like protein 1 (KNSLI), lysosomal acid
CC lipase (LIPA) and tumour necrosis factor receptor SF6 (TNFRSF6). The
CC method is useful in determining the presence or predisposition to a
CC neurodegenerative disease, particularly Alzheimer's disease. The present
CC sequence is that of a sequencing primer which was used for sequencing of
CC a region of the human SNCG gene in the exemplification of the invention.
XX
SQ Sequence 18 BP; 5 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 17.1%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 75;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 35 ACTCGGACCGGCTAAAG 52
Db 1 ACACGGGAGCGGCTACAG 18

RESULT 83
AAZ44901/C
ID AAZ44901 standard; DNA; 76 BP.

XX AC AAZ44901;

XX 16-MAY-2000 (first entry)

XX P. alcaligenes repeat (PAR) element DNA #8.

XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
KW detoxifying enzyme; repeat element; PAR; ss.

XX Pseudomonas alcaligenes.

XX WO9964632-A1.

XX 16-DEC-1999.

XX 11-JUN-1999; 99WO-US013295.

XX 12-JUN-1998; 98US-0089086P.

XX 12-JUN-1998; 98US-0089101P.

XX (NEWE) NEW ENGLAND BIOLABS INC.

XX Raleigh EA, Vaisvila R, Morgan RD;

XX WPI; 2000-116558/10.

XX Cloning intact genes used to isolate genes for restriction enzymes.

XX Claim 7a; Page 59; 97pp; English.

XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes (used as reagents in
XX molecular biology); adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AAZ44894-244980 represent the
XX Pseudomonas alcaligenes repeat (PAR) elements described in the method of
XX the invention

XX Sequence 76 BP; 15 A; 25 C; 20 G; 16 T; 0 U; 0 Other;


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Db      17 GGTTCAGCAGTTCGC 2
|||||
RESULT 86
AAF52745
ID AAF52745 standard; DNA; 15 BP.
XX
AC AAF52745;
XX
XX 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #3705.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cystostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 85; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 1 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match      16.1%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 82;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 18 AGTCGTTTCGTTTCG 31
|||||
Db      1 AGTCCTTCGTTTCG 14
|||||

RESULT 87
AAF51767
ID AAF51767 standard; DNA; 15 BP.
XX
AC AAF51767;
XX
XX 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #2727.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cystostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 78; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 3 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      16.1%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 82;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 43 CCGCTAAAGCCGG 56
|||||
Db      1 CCGCTAAAGCCGG 14
|||||

RESULT 88
AAF51765
ID AAF51765 standard; DNA; 15 BP.
XX

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AC AAF51765;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #2725.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 78; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 5 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 16.1%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 82;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 42 ACCGGCTAAAGCCG 55
DB 2 ACCGGCTAAACCCG 15

RESULT 89
AAF52742
ID AAF52742 standard; DNA; 15 BP.
XX
AC AAF52742;
XX
DT 30-MAR-2001 (first entry)
XX

IGF-I oligonucleotide #3702.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 85; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 16.1%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 82;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 16 CAAGTCGTTGCGTT 29
DB 2 CAAGTCGTTGCGTT 15

RESULT 90
AAF79809/C
ID AAA79809 standard; DNA; 17 BP.
XX
AC AAA79809;
XX
DT 20-NOV-2000 (first entry)
XX
DE Hepatitis B virus related oligonucleotide probe #72.
XX
KW Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
KW mutation; high-density gene chip; ss.

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XX OS Hepatitis B virus.
XX PN CN1252452-A.
XX PD 10-MAY-2000.
XX PF 24-SEP-1999; 99CN-00114460.
XX PR 24-SEP-1999; 99CN-00114460.
XX PA (UYDO-) UNIV DONGNAN.
XX PI Sun X, Lu Z, Wang Y;
XX WPI; 2000-443233/39.
XX PT High-density gene chip making process.
XX PS Example 1; Fig 15; 19pp; Chinese.
XX CC The present invention describes a method which comprises making a high-
CC density gene chip, specifically for making high-density micro-array of
CC oligonucleotide probes. An oligonucleotide probe selecting process to
CC seek preferentially length variable and coverage variable probes is
CC provided to ensure identical cross melting temperature of probes to the
CC maximum limit, and this can make the cross control of gene chip
CC relatively simple and raise the reliability of the gene chip detecting
CC results. The process proposes a specific probe selection method for
CC detecting target sequence directly, detecting mutation in both specific
CC and non-specific sites and a probe overall arrangement scheme. AAA79738
CC to AAA80201 represent oligonucleotide probe sequences which are used in
CC examples from the present invention
XX SQ Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 97;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 33 TCACCTCGGGACCG 46
Db 17 TCACCTGGGACCG 4

RESULT 91
AAA79811/c
ID AAA79811 standard; DNA; 17 BP.
XX AC AAA79811;
XX DT 20-NOV-2000 (first entry)
XX DE Hepatitis B virus related oligonucleotide probe #74.
XX KW Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
XX mutation; high-density gene chip; ss.
OS Hepatitis B virus.
XX CN1252452-A.
XX PD 10-MAY-2000.
XX PF 24-SEP-1999; 99CN-00114460.
XX PR 24-SEP-1999; 99CN-00114460.
XX PA (UYDO-) UNIV DONGNAN.
XX PI Sun X, Lu Z, Wang Y;
XX WPI; 2000-443233/39.
XX DR

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XX High-density gene chip making process.
XX Example 1; Fig 15; 19pp; Chinese.
XX CC The present invention describes a method which comprises making a high-
XX density gene chip, specifically for making high-density micro-array of
XX oligonucleotide probes. An oligonucleotide probe selecting process to
XX seek preferentially length variable and coverage variable probes is
XX provided to ensure identical cross melting temperature of probes to the
XX maximum limit, and this can make the cross control of gene chip
XX relatively simple and raise the reliability of the gene chip detecting
XX results. The process proposes a specific probe selection method for
XX detecting target sequence directly, detecting mutation in both specific
XX and non-specific sites and a probe overall arrangement scheme. AAA79738
XX to AAA80201 represent oligonucleotide probe sequences which are used in
XX examples from the present invention
XX SQ Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 16.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 97;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 32 CTCACCTCGGGACCG 45
Db 14 CTCACCTGGGACCG 1

RESULT 92
ACD60623/c
ID ACD60629 standard; RNA; 17 BP.
XX AC ACD60629;
XX DT 24-SEP-2003 (first entry)
XX DE HCV DNAzyme substrate sequence #1927.
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; zincyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
OS Hepatitis C virus.
XX PN WO200281494-A1.
XX PD 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

```

PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Claim 1; Page 268; 387pp; English.
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNazyme or minus strand DNazyme sequences disclosed in the present
 CC invention
 XX Sequence 17 BP; 4 A; 1 C; 6 G; 0 T; 6 U; 0 Other;
 SQ Query Match 16.1%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 97;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 56 GCCCCTTAACCAAA 69
 Db 15 GCCCCTTAACCAAA 2
 RESULT 93
 ACDE2041
 ID ACDE2041 standard; RNA; 17 BP.
 XX AC ACDE2041;
 XX 23-SEP-2003 (first entry)
 DE HCV minus strand DNazyme substrate sequence #352.
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX Hepatitis C virus.
 XX WO200281494-A1.
 XX 17-OCT-2002.
 XX 26-MAR-2002; 2002WO-US009187.
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.

PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 PI WPI; 2003-229207/22.
 DR Novel compound useful for treating cirrhosis, liver failure,
 XX hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Claim 1; Page 281; 387pp; English.
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNazyme or minus strand DNazyme sequences disclosed in the present
 CC invention
 XX Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
 SQ Query Match 16.1%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 97;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 56 GCCCCTTAACCAAA 69
 Db 1 GCCCCTTAACCAAA 14
 RESULT 94
 ACDE2040
 ID ACDE2040 standard; RNA; 17 BP.
 XX AC ACDE2040;
 XX 23-SEP-2003 (first entry)
 DE HCV minus strand DNazyme substrate sequence #351.
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX Hepatitis C virus.
 XX WO200281494-A1.

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XX 17-OCT-2002.
XX
XX
XX 26-MAR-2002; 2002MO-US009187.
XX
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
XX
XX 24-OCT-2001; 2001US-0335059P.
XX
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (BLAT/) BLATT L.
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XX (MACE/) MACEJAK D.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (MORR/) MORRISSEY D.
XX
XX (PAVC/) PAVCO P.
XX
XX (LEEP/) LEE P.
XX
XX (DRAP/) DRAPER K.
XX
XX (ROBE/) ROBERTS E.
XX
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Claim 1; Page 281; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HCV
XX DNazyme or minus strand DNazyme sequences disclosed in the present
XX invention
XX
XX Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 16.1%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 97;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 56 GCCCCTTAACCAAA 69
XX ||||| :|||||
XX Db 4 GCCCCAUAACCAAA 17
XX
XX RESULT 95
XX ADI85383
XX ID ADI85383 standard; RNA; 17 BP.
XX
XX AC ADI85383;
XX
XX 03-JUN-2004 (first entry)
XX
XX HCV DNazyme substrate sequence #2629.
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNazyme.
XX
XX Hepatitis C virus.
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (ROBE/) ROBERTS E.
XX
XX (PAVC/) PAVCO P. A.
XX
XX (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 2629; 198pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNazyme substrate
XX sequence.
XX
XX Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 16.1%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 97;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 56 GCCCCTTAACCAAA 69
XX ||||| :|||||
XX Db 1 GCCCCAUAACCAAA 14
XX
XX RESULT 96
XX ADI85382
XX ID ADI85382 standard; RNA; 17 BP.
XX
XX AC ADI85382;
XX
XX 03-JUN-2004 (first entry)
XX
XX HCV DNazyme substrate sequence #2628.
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNazyme.
XX
XX Hepatitis C virus.
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
XX
XX (MCSW/) MCSWIGGEN J.

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KW HCV infection; type I interferon; DNazyme.
XX
XX Hepatitis C virus.
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (ROBE/) ROBERTS E.
XX
XX (PAVC/) PAVCO P. A.
XX
XX (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 2629; 198pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNazyme substrate
XX sequence.
XX
XX Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 16.1%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 97;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 56 GCCCCTTAACCAAA 69
XX ||||| :|||||
XX Db 1 GCCCCAUAACCAAA 14
XX
XX RESULT 96
XX ADI85382
XX ID ADI85382 standard; RNA; 17 BP.
XX
XX AC ADI85382;
XX
XX 03-JUN-2004 (first entry)
XX
XX HCV DNazyme substrate sequence #2628.
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNazyme.
XX
XX Hepatitis C virus.
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
XX
XX (MCSW/) MCSWIGGEN J.

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PA (ROBE/) ROBERTS E.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 2628; 198pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNazyme substrate
XX sequence.
XX
XX SEQ Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 16.1%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 97;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 56 GCCCCTTAACCAA 69
XX DB 4 GCCCAUACCAA 17
XX
XX RESULT 97
XX ADI84681/c
XX ID ADI84681 standard; RNA; 17 BP.
XX
XX AC ADI84681;
XX
XX DT 03-JUN-2004 (first entry)
XX
XX DE HCV DNazyme substrate sequence #1927.
XX
XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNazyme.
XX
XX OS Hepatitis C virus.
XX
XX PN US2003125270-A1.
XX
XX PD 03-JUL-2003.
XX
XX PF 18-DEC-2000; 2000US-00740332.
XX
XX PR 18-DEC-2000; 2000US-00740332.
XX
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 1927; 198pp; English.
XX
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNazyme substrate
XX sequence.
XX
XX SEQ Sequence 17 BP; 4 A; 1 C; 6 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 16.1%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 92.9%; Pred. No. 97;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 56 GCCCCTTAACCAA 69
XX DB 15 GCCCATAACCAA 2
XX
XX RESULT 98
XX AA288521/c
XX ID AA288521 standard; DNA; 73 BP.
XX
XX AC AA288521;
XX
XX DT 16-MAY-2000 (first entry)
XX
XX DE P. alcaligenes repeat (PAR) element DNA PARf18.
XX
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
XX
XX OS Pseudomonas alcaligenes.
XX
XX PN WO964632-A1.
XX
XX PD 16-DEC-1999.
XX
XX PF 11-JUN-1999; 99WO-US013295.
XX
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX
XX PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX
XX DR WPI; 2000-116558/10.
XX
XX PT Cloning intact genes used to isolate genes for restriction enzymes.
XX
XX Example 1B; Fig 3E; 97pp; English.
XX
XX This invention describes a novel method for cloning intact, diversity-
XX selected genes (I) from within gene cassettes (GC) which comprises
XX identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
XX to these repeats and amplification to produce DNA fragments containing
XX (I), ligating these fragments into a vector and transforming cells with
XX the vector. This method is used to clone a wide variety of prokaryotic
XX genes that provide a selective advantage under particular conditions,
XX particularly those that encode restriction enzymes used as reagents in
XX molecular biology; adhesins (for use in coating or for targeting
XX molecules or organisms to particular sites, e.g. for competitive
XX exclusion of a selected pathogen); detoxifying enzymes; toxins that
XX interact with a host, e.g. for synthesis of inhibitors or antagonists of
XX the toxin, or in vaccination, or a modification methyltransferase. Intact
XX genes can be cloned directly with a high probability that the orientation
XX of expression is known in advance and low probability of association with
XX extraneous, possibly toxic, genes. AA288504-288521 represent Pseudomonas
XX alcaligenes repeat (PAR) elements described in the method of the
XX invention
XX

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SQ Sequence 73 BP; 17 A; 24 C; 16 G; 16 T; 0 U; 0 Other;
Query Match 16.1%; Score 12.4; DB 1; Length 73;
Best Local Similarity 72.7%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
DB 58 GGGCCGGAATTTAGCCGGTCCC 37

RESULT 99
AAZ88509/c
ID AAZ88509 standard; DNA; 74 BP.
XX AC AAZ88509;
XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA PARf6.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-Al.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX PD WPI; 2000-116558/10.
XX PF Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Example 1B; Fig 3E; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
CC alcaligenes repeat (PAR) elements described in the method of the
CC invention
XX SQ Sequence 74 BP; 13 A; 26 C; 17 G; 18 T; 0 U; 0 Other;
Query Match 16.1%; Score 12.4; DB 1; Length 74;
Best Local Similarity 72.7%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
DB 58 GGGCCGCGGAACCGCGTCCC 37

RESULT 101
AAZ44903/c
ID AAZ44903 standard; DNA; 76 BP.
XX AC AAZ44903;
XX DT 16-MAY-2000 (first entry)
XX DE P. alcaligenes repeat (PAR) element DNA PARf4.
XX KW Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX KW detoxifying enzyme; repeat element; PAR; ss.
XX OS Pseudomonas alcaligenes.
XX PN WO9964632-Al.
XX PD 16-DEC-1999.
XX PF 11-JUN-1999; 99WO-US013295.
XX PR 12-JUN-1998; 98US-0089086P.
XX PR 12-JUN-1998; 98US-0089101P.
XX PA (NEWE ) NEW ENGLAND BIOLABS INC.
XX PI Raleigh EA, Vaisvila R, Morgan RD;
XX PD WPI; 2000-116558/10.
XX PF Cloning intact genes used to isolate genes for restriction enzymes.
XX PS Example 1B; Fig 3E; 97pp; English.
XX CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AAZ88504-288521 represent Pseudomonas
CC alcaligenes repeat (PAR) elements described in the method of the
CC invention
XX SQ Sequence 74 BP; 14 A; 28 C; 17 G; 15 T; 0 U; 0 Other;
Query Match 16.1%; Score 12.4; DB 1; Length 74;
Best Local Similarity 72.7%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 39 GGGACCGGCTAAAGCGGCCCC 60
DB 58 GGGCCGCGGGAACCGCGTCCC 37

RESULT 101
AAZ44903/c
ID AAZ44903 standard; DNA; 76 BP.
XX AC AAZ44903;
XX DT 16-MAY-2000 (first entry)
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XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 13610; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 0 A; 8 C; 6 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 15.8%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 1.1e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
Qy 39 GGGACCGGCTAAAGCCG 55
Db 17 GGGCCCGGCAAGAGCCG 1

RESULT 104
ACN01433
ID ACN01433 standard; RNA; 17 BP.
XX
XX ACN01433;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Inozyme substrate SEQ ID NO 1423.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 1423; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 0 A; 8 C; 6 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 15.8%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 1.1e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
Qy 39 GGGACCGGCTAAAGCCG 55
Db 17 GGGCCCGGCAAGAGCCG 1

RESULT 105
ACN09482/c
ID ACN09482 standard; RNA; 17 BP.
XX
XX ACN09482;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 9485.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 9485; 495pp; English.
XX

```

XX The invention relates to nucleic acid molecules that modulate replication
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
 CC treating a condition related to WNV infection e.g. pancreatitis,
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
 CC molecule is selected from the group of ribozymes consisting of
 CC Hammerhead, inozyme, G-cleaver, DNzyme, Amberzyme and Zinzyme. The
 CC nucleic acid molecules further comprise at least five ribose residues, at
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC least three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 XX molecule of the invention

XX SQ Sequence 17 BP; 0 A; 8 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 15.8%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 1.1e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 40 GGACCGGCTAAAGCCGG 56
 || ||||| |||||
 Db 17 GGCCCGGCAGAGCCGG 1

RESULT 106
 ACD60862/c
 ID ACD60862 standard; RNA; 17 BP.
 AC ACD60862;
 XX
 DT 24-SEP-2003 (first entry)
 XX
 DE HCV DNzyme substrate sequence #2048.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.

XX
 OS Hepatitis C virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;

DR WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Claim 1; Page 270; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV. The compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, and hepatocellular
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNzyme or minus strand DNzyme sequences disclosed in the present
 CC invention

XX SQ Sequence 17 BP; 1 A; 7 C; 8 G; 0 T; 1 U; 0 Other;

Query Match 15.8%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 1.1e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 30 CGCTCACTCGGACCGG 46
 ||||| |||||
 Db 17 CGCTCGCGGACCGG 1

RESULT 107
 ACD57597
 ID ACD57597 standard; RNA; 17 BP.
 AC ACD57597;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HCV DNzyme substrate sequence #407.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.

XX
 OS Hepatitis C virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.


```

PA (MACE/) MACEJACK D.
PA (MCSW/) MCSWIGGEN J.
PA (ROBE/) ROBERTS E.
PA (MORR/) MORRISSEY D.
PA (PASC/) PAVCO P.
PA (PASC/) PAVCO P.
PA (LEPP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX
DR WPI; 2003-229207/22.
XX
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX
PS Claim 1; Page 241; 387pp; English.
XX
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, ambrizymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNazyme or minus strand DNazyme sequences disclosed in the present
CC invention
XX
XX
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
Query Match 15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 1.1e+02;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
QY 10 CTGTTCAAGTCGTCG 26
Db 1 CAGGUUCACUCGUCGG 17
RESULT 108
ADI84802/c
ID ADI84802 standard; RNA; 17 BP.
XX
XX
AC ADI84802;
XX
XX
DT 03-JUN-2004 (first entry)
XX
XX
DE HCV DNazyme substrate sequence #2048.
XX
XX
KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW HCV infection; type I interferon; DNazyme.
XX
XX
OS Hepatitis C virus.
XX
XX
PN US2003125270-A1.
XX
XX
PD 03-JUL-2003.
XX
XX
PF 18-DEC-2000; 2000US-00740332.
XX
XX
PR 18-DEC-2000; 2000US-00740332.
XX
XX
PA (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(ROBE/) ROBERTS E.
(PASC/) PAVCO P.
(PASC/) PAVCO P.
(LEPP/) LEE P.
(DRAP/) DRAPER K.
(ROBE/) ROBERTS E.
Blatt L, Mcswiggen J, Roberts E, Pavco P, Macejack D;
WPI; 2004-031273/03.
Enzymatic nucleic acid molecules which specifically cleave RNA derived
from hepatitis C virus (HCV), useful for the treatment of HCV infections,
especially in combination with type I interferon therapy.
Claim 1; SEQ ID NO 2048; 198pp; English.
The invention relates to an enzymatic nucleic acid molecule which
specifically cleaves RNA derived from hepatitis C virus (HCV), in which
the binding arms of the enzymatic nucleic acid molecule comprises given
sequences complementary to any of the defined substrate sequences given
in the specification. The nucleic acid molecule may be administered for
the treatment of HCV infections, especially in combination with type I
interferons. The present sequence represents a HCV DNazyme substrate
sequence.
Sequence 17 BP; 1 A; 7 C; 8 G; 0 T; 1 U; 0 Other;
Query Match 15.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.1e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 30 CGCTCACTCGGACCGG 46
Db 17 CGCTCGCGCGCACCGG 1
RESULT 109
ADI83161
ID ADI83161 standard; RNA; 17 BP.
XX
XX
AC ADI83161;
XX
XX
DT 03-JUN-2004 (first entry)
XX
XX
DE HCV DNazyme substrate sequence #407.
XX
XX
KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW HCV infection; type I interferon; DNazyme.
XX
XX
OS Hepatitis C virus.
XX
XX
PN US2003125270-A1.
XX
XX
PD 03-JUL-2003.
XX
XX
PF 18-DEC-2000; 2000US-00740332.
XX
XX
PR 18-DEC-2000; 2000US-00740332.
XX
XX
PA (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(ROBE/) ROBERTS E.
(PASC/) PAVCO P.
(PASC/) PAVCO P.
(LEPP/) LEE P.
(DRAP/) DRAPER K.
(ROBE/) ROBERTS E.
Blatt L, Mcswiggen J, Roberts E, Pavco P, Macejack D;
WPI; 2004-031273/03.
Enzymatic nucleic acid molecules which specifically cleave RNA derived
from hepatitis C virus (HCV), useful for the treatment of HCV infections,
especially in combination with type I interferon therapy.
Claim 1; SEQ ID NO 407; 198pp; English.

```

```

XX CC The invention relates to an enzymatic nucleic acid molecule which
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC the binding arms of the enzymatic nucleic acid molecule comprises
CC sequences complementary to any of the defined substrate sequences given
CC in the specification. The nucleic acid molecule may be administered for
CC the treatment of HCV infections, especially in combination with type I
CC interferons. The present sequence represents a HCV DNazyme substrate
CC sequence.
XX SQ Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 15.8%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 58.8%; Pred. No. 1.1e+02;
XX Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 10 CTGGTTCGAAGTCGTCG 26
XX DB 1 CAGGUUCACUUGUCCG 17
XX
XX RESULT 110
XX ABH80747/c
XX ID ABH80747 standard; DNA; 12 BP.
XX AC ABH80747;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 280740 for detecting SNP TSC0009019.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 280740; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 12 BP; 2 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 12; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 70;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 27 CTTCGCTCACTC 38
XX DB 1 CTTCGCTCACTC 12
XX
XX RESULT 112
XX ABC51264/c
XX ID ABC51264 standard; DNA; 13 BP.
XX AC ABC51264;

```

```

XX CC The invention relates to an enzymatic nucleic acid molecule which
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC the binding arms of the enzymatic nucleic acid molecule comprises
CC sequences complementary to any of the defined substrate sequences given
CC in the specification. The nucleic acid molecule may be administered for
CC the treatment of HCV infections, especially in combination with type I
CC interferons. The present sequence represents a HCV DNazyme substrate
CC sequence.
XX SQ Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 15.8%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 58.8%; Pred. No. 1.1e+02;
XX Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 10 CTGGTTCGAAGTCGTCG 26
XX DB 1 CAGGUUCACUUGUCCG 17
XX
XX RESULT 110
XX ABH80747/c
XX ID ABH80747 standard; DNA; 12 BP.
XX AC ABH80747;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 280740 for detecting SNP TSC0009019.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 324019; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 12 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 12; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 70;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 27 CTTCGCTCACTC 38
XX DB 1 CTTCGCTCACTC 12
XX
XX RESULT 112
XX ABC51264/c
XX ID ABC51264 standard; DNA; 13 BP.
XX AC ABC51264;

```



```
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 51282; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 15.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 61 TTAACCAACGCT 72
XX 1 TTAACCAACGCT 12
XX
XX RESULT 115
XX ABF52142/c
XX ID ABF52142 standard; DNA; 13 BP.
XX AC ABF52142;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 152139 for detecting SNP TSC0038439.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 152139; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 15.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 61 TTAACCAACGCT 72
XX 1 TTAACCAACGCT 12
XX
XX RESULT 116
XX ABH56997
XX ID ABH56997 standard; DNA; 13 BP.
XX AC ABH56997;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 256974 for detecting SNP TSC0006666.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
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XX (EPIG-) EPIGENOMICS AG.
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XX Olek A, Piepenbrock C, Berlin K;
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XX WPI; 2001-657177/75.
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XX Set of oligonucleotides, useful for diagnosis and cell typing, is
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XX methylation status.
XX
XX Claim 1; SEQ ID NO 256974; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 15.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 59 CCTTAACCAAC 70
XX |||||||||
```

Db 2 CCTTAACCAAC 13

RESULT 117
ABH56996/C
ID ABH56996 standard; DNA; 13 BP.
XX
XX AC ABH56996;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 256973 for detecting SNP TSC0006666.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; RNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 256973; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 59 CCTTAACCAAC 70
DB 12 CCTTAACCAAC 1

RESULT 118
AAZ62721
ID AAZ62721 standard; RNA; 15 BP.
XX
XX AC AAZ62721;
XX
XX DT 28-MAR-2000 (first entry)
XX
XX DE Substrate for HH ribozyme HCV-6107 which cleaves HCV RNA at nt. 6107.
XX

KW Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW autoimmune disease; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO9955847-A2.
XX
XX PD 04-NOV-1999.
XX
XX PF 26-APR-1999; 99WO-US009027.
XX
XX PR 27-APR-1998; 98US-0083217P.
PR 18-SEP-1998; 98US-0100842P.
PR 25-FEB-1999; 99US-00257608.
PR 23-MAR-1999; 99US-00274553.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
XX
XX DR WPI; 2000-062023/05.
XX
XX PT Novel ribozymes for the treatment of diseases and conditions related to
PT hepatitis C infection.
XX
XX PS Claim 1; Page 61; 123pp; English.
XX
XX The present sequence represents the preferred target sequence of an
CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC the Hepatitis C virus (HCV) RNA sequence at the base position given in
CC the descriptor line. The HCV sequence was screened for optimal ribozyme
CC target sites using a computer folding algorithm and regions of the mRNA
CC which did not form secondary folding structures and contained potential
CC ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC target these sites and their activities optimised by either varying the
CC length of the binding arms or by modification to prevent degradation by
CC nucleases. The ribozymes of the invention inhibit gene expression and/or
CC viral replication, and are used to treat diseases associated with
CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC hepatocellular carcinoma. The ribozymes may be used in combination with
CC interferon to treat HCV infection, other infectious diseases, autoimmune
CC diseases, and cancer
XX
XX SQ Sequence 15 BP; 1 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 97;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 21 CGTTCGCTTCGC 32
DB 4 CGUUCGCUUCC 15

RESULT 119
ABX00572
ID ABX00572 standard; RNA; 15 BP.
XX
XX AC ABX00572;
XX
XX DT 23-DEC-2002 (first entry)
XX
XX DE Hepatitis C virus substrate #354 for HCV hammerhead ribozyme #354.
XX
XX KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW type I interferon; interferon alpha; interferon beta; cytosatic;
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
XX OS Hepatitis C virus..

```

XX US2002082225-A1.
XX PN
XX 27-JUN-2002.
XX PD
XX 23-MAR-1999; 99US-00274553.
XX PF
XX 23-MAR-1999; 99US-00274553.
XX PR
XX (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PA (ROBE/) ROBERTS B.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX PI
XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
XX WPI; 2002-617759/66.
XX DR
XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
XX PT replication and are useful to treat hepatitis C virus infections and
XX PT cirrhosis, liver failure or hepatocellular carcinoma.
XX PT
XX Claim 1; Page 31; 80pp; English.
XX PS
XX The present invention relates to enzymatic nucleic acids which
XX CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
XX CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
XX CC (HP) motif where the binding arms comprise sequences complementary to one
XX CC of the substrate sequences defined in the specification. The HCV
XX CC ribozymes are useful for modulating the expression and/or replication of
XX CC HCV. They can be used to treat cirrhosis, liver failure and/or
XX CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
XX CC a condition associated with HCV infection in conjunction with one or more
XX CC other drug therapies, particularly type I interferon, especially
XX CC interferon alpha, beta or gamma or consensus interferon. The present
XX CC sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
XX CC Some of the sequence data for this patent did not form part of the
XX CC printed specification. The complete sequence data for this patent was
XX CC obtained in electronic format directly from the USPTO web site at
XX CC seqdata.uspto.gov/psipsDIDEntry.html
XX CC
XX SQ Sequence 15 BP; 1 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
XX
Query Match 15.6%; Score 12; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 97;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 21 CGTTCGCTTCGC 32
Db 4 CGUUCGCUUCGC 15
RESULT 120
ACD59758
ID ACD59758 standard; RNA; 17 BP.
XX
XX ACD59758;
XX AC
XX 24-SEP-2003 (first entry)
XX DT
XX HCV DNazyme substrate sequence #1504.
XX DE
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX KW
XX OS Hepatitis C virus.

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XX WO200281494-A1.
XX PN
XX 17-OCT-2002.
XX PD
XX 26-MAR-2002; 2002WO-US009187.
XX PF
XX 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJACK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX DR
XX Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PT
XX Claim 1; Page 260; 387pp; English.
XX PS
XX The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HCV
XX CC DNazyme or minus strand DNazyme sequences disclosed in the present
XX CC invention
XX SQ
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
XX
Query Match 15.6%; Score 12; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 8; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 21 CGTTCGCTTCGC 32
Db 4 CGUUCGCUUCGC 15
RESULT 121
ACD62855/c
ID ACD62855 standard; RNA; 17 BP.
XX
XX ACD62855;
XX AC
XX 24-SEP-2003 (first entry)
XX DT
XX HCV minus strand DNazyme substrate sequence #774.
XX DE

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| | |
|----|---|
| XX | Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; |
| KW | RNA stability; RNA expression; RNA synthesis; antisense; |
| KW | enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme; |
| KW | amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; |
| KW | HBV reverse transcriptase; Enhancer I region; viral replication; |
| KW | degenerative; disease state; HBV infection; HCV infection; cirrhosis; |
| KW | liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; |
| KW | virucide; antiinflammatory; substrate; ss. |
| XX | Hepatitis C virus. |
| OS | WO200281494-A1. |
| XX | 17-OCT-2002. |
| XX | 26-MAR-2002; 2002WO-US009187. |
| XX | 26-MAR-2001; 2001US-00817879. |
| PR | 08-JUN-2001; 2001US-00877478. |
| PR | 08-JUN-2001; 2001US-0296876P. |
| PR | 24-OCT-2001; 2001US-0335059P. |
| PR | 05-DEC-2001; 2001US-0337055P. |
| XX | (RIBO-) RIBOZYME PHARM INC. |
| PA | (BLAT/) BLATT L. |
| PA | (MACE/) MACEJACK D. |
| PA | (MCSW/) MCSWIGGEN J. |
| PA | (MORR/) MORRISSEY D. |
| PA | (PAVC/) PAVCO P. |
| PA | (LEEP/) LEE P. |
| PA | (DRAP/) DRAPER K. |
| PA | (ROBE/) ROBERTS E. |
| XX | Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P; |
| PI | Draper K, Roberts E; |
| PI | WPI; 2003-229207/22. |
| DR | Novel compound useful for treating cirrhosis, liver failure, |
| XX | hepatocellular carcinoma, or condition associated with hepatitis C virus |
| PT | infection. |
| XX | Claim 1; Page 288; 387pp; English. |
| XX | The present invention relates to nucleic acid molecules which modulate |
| CC | the synthesis, expression and/or stability of Hepatitis C virus (HCV) or |
| CC | Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense |
| CC | and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, |
| CC | inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed |
| CC | are nucleic acid decoy molecules and aptamers that bind to HBV reverse |
| CC | transcriptase and/or HBV reverse transcriptase primer sequences, as well |
| CC | as oligonucleotides that specifically bind the Enhancer I region of HBV |
| CC | DNA. The nucleic acids may be used to modulate the expression of HBV |
| CC | genes and HBV viral replication. Also disclosed is a method for screening |
| CC | compounds and/or potential therapies directed against HBV, and compounds |
| CC | that modulate the expression and/or replication of HCV. The compounds and |
| CC | methods of the invention are useful for the treatment of degenerative and |
| CC | disease states related to HBV and HCV infection, replication and gene |
| CC | expression such as cirrhosis, liver failure, and hepatocellular |
| CC | carcinoma. The present sequence represents a substrate for one of the HCV |
| CC | DNAzyme or minus strand DNAzyme sequences disclosed in the present |
| XX | invention |
| XX | Sequence 17 BP; 4 A; 7 C; 5 G; 0 T; 1 U; 0 Other; |
| SQ | Query Match 15.6%; Score 12; DB 1; Length 17; |
| | Best Local Similarity 100.0%; Pred. No. 1.2e+02; |
| | Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| QY | 21 CGTTCGCTTCGC 32 |
| DB | 15 CGTTCGCTTCGC 4 |

| | |
|------------|---|
| RESULT 122 | |
| AD185805/C | AD185805 standard; RNA; 17 BP. |
| XX | AD185805; |
| AC | AD185805; |
| DT | 03-JUN-2004 (first entry) |
| XX | HCV DNazyme substrate sequence #3051. |
| DE | ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV; |
| XX | HCV infection; type I interferon; DNazyme. |
| KW | Hepatitis C virus. |
| OS | US2003125270-A1. |
| XX | 03-JUL-2003. |
| PD | 18-DEC-2000; 2000US-00740332. |
| PF | 18-DEC-2000; 2000US-00740332. |
| XX | PR |
| PR | (BLAT/) BLATT L. |
| XX | (MCSW/) MCSWIGGEN J. |
| PA | (ROBE/) ROBERTS E. |
| PA | (PAVC/) PAVCO P A. |
| PA | (MACE/) MACEJACK D. |
| XX | Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D; |
| PI | WPI; 2004-031273/03. |
| XX | Enzymatic nucleic acid molecules which specifically cleave RNA derived |
| PT | from hepatitis C virus (HCV), useful for the treatment of HCV infections, |
| PT | especially in combination with type I interferon therapy. |
| XX | Claim 1; SEQ ID NO 3051; 198pp; English. |
| PS | The invention relates to an enzymatic nucleic acid molecule which |
| XX | specifically cleaves RNA derived from hepatitis C virus (HCV), in which |
| CC | the binding arms of the enzymatic nucleic acid molecule comprises |
| CC | sequences complementary to any of the defined substrate sequences given |
| CC | in the specification. The nucleic acid molecule may be administered for |
| CC | the treatment of HCV infections, especially in combination with type I |
| CC | interferons. The present sequence represents a HCV DNazyme substrate |
| CC | sequence. |
| XX | Sequence 17 BP; 4 A; 7 C; 5 G; 0 T; 1 U; 0 Other; |
| SQ | Query Match 15.6%; Score 12; DB 1; Length 17; |
| | Best Local Similarity 100.0%; Pred. No. 1.2e+02; |
| | Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| QY | 21 CGTTCGCTTCGC 32 |
| DB | 15 CGTTCGCTTCGC 4 |

| | |
|------------|---|
| RESULT 123 | |
| AD184258 | AD184258 standard; RNA; 17 BP. |
| ID | AD184258 |
| XX | AC |
| XX | AD184258; |
| DT | 03-JUN-2004 (first entry) |
| XX | HCV DNazyme substrate sequence #1504. |
| DE | ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV; |
| KW | HCV infection; type I interferon; DNazyme. |

KW viral replication; degenerative; disease state; HBV infection;
 KW HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;
 KW hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 XX
 PR 08-JUN-2001; 2001US-00877478.
 PR
 PR 08-JUN-2001; 2001US-02968876P.
 PR
 PR 24-OCT-2001; 2001US-0335059P.
 PR
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY J.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 XX WPI; 2003-229207/22.
 DR
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 PT
 XX
 PS Claim 1; Page 322; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, ambrizymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a target for one of the anti-
 CC HCV nucleic acid molecules disclosed in the present invention
 XX
 SQ Sequence 15 BP; 4 A; 3 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 15.3%; Score 11.8; DB 1; Length 15;
 Best Local Similarity 86.7%; Pred. No. 1.1e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 9 ACTGGTTCAAGTCGT 23
 DB 15 ACAGGTTCAACTCGT 1
 RESULT 126
 ADM81027/c
 ID ADM81027 standard; DNA; 15 BP.
 XX
 AC ADM81027;

XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Oligonucleotide #2 used to illustrate a solid support.
 XX
 KW Solid support; semiconducting surface region;
 KW electrografted organic film; biocompatible polymer; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004005410-A1.
 XX
 XX 15-JAN-2004.
 PD
 XX 16-JUN-2003; 2003WO-FR001814.
 PF
 XX 04-JUL-2002; 2002FR-00008381.
 PR
 XX (COMS) COMMISSARIAT ENERGIE ATOMIQUE.
 PA
 XX Bureau C, Mouanda B, Ameur S, Charlier J, Palacin S;
 PI WPI; 2004-142974/14.
 XX
 DR Solid support, e.g. useful for binding molecules of interest, comprises
 XX at least one (semi)conducting surface region of reducible oxide
 XX functionalized with an electrografted organic film.
 PT
 PT Example 11; SEQ ID NO 2; 59pp; French.
 XX
 PS The present invention relates to a solid support, which comprises at
 XX least one (semi)conducting surface region of reducible oxide
 CC functionalized with an electrografted organic film formed from
 CC electroactive organic precursors having functional groups, at least 90%
 CC of which are accessible for forming covalent, ionic or hydrogen bonds
 CC with complementary groups within the film. The support is useful: as an
 CC adhesion primary (primaire d'adhesion) for binding molecules of interest
 CC or objects bearing a complementary function, especially where the
 CC molecules of interest are proteins and the support is used as a bioactive
 CC surface or protein chip or the molecules of interest are nucleic acid
 CC molecules and the support is used as a bioactive surface or nucleic acid
 CC chip or the molecules of interest or objects bearing a complementary
 CC function are biocompatible polymers and the support is used as a
 CC biocompatible surface or surface with encapsulating properties; or for
 CC adhering objects to (semi)conducting surfaces by surface chemical
 CC reactions. The present sequence was used in an example from the invention
 CC for illustrating binding oligonucleotides on to the solid support.
 XX
 SQ Sequence 15 BP; 5 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.8; DB 1; Length 15;
 Best Local Similarity 86.7%; Pred. No. 1.1e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 12 GCTTCAAGTCGTTCG 26
 DB 15 GCTTCAAGTCGTTCG 1
 RESULT 127
 ADI87715/c
 ID ADI87715 standard; RNA; 15 BP.
 XX
 AC ADI87715;
 XX
 XX 03-JUN-2004 (first entry)
 DT
 DE Anti-HCV molecule target sequence #204.
 XX
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
 KW HCV infection; type I interferon; DNazyme.
 XX
 OS Hepatitis C virus.

```

XX PN US2003125270-A1.
XX PD 03-JUL-2003.
XX PF 18-DEC-2000; 2000US-00740332.
XX PR 18-DEC-2000; 2000US-00740332.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX DR WPI; 2004-031273/03.
XX PT Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX PS Claim 1; SEQ ID NO 4758; 198pp; English.
XX CC The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents an anti-HCV molecule target
XX sequence.
XX SQ Sequence 15 BP; 4 A; 3 C; 4 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.8; DB 1; Length 15;
XX Best Local Similarity 86.7%; Pred. No. 1.1e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 9 ACTGGTTCAAGTCGT 23
XX DB 15 ACAGGTTCAACTCGT 1
XX
XX RESULT 128
XX ADI92423/C
XX ID ADI92423 standard; RNA; 16 BP.
XX AC ADI92423;
XX DT 03-JUN-2004 (first entry)
XX DE Anti-HCV enzymatic nucleic acid substrate sequence #25.
XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNzyme.
XX OS Hepatitis C virus.
XX PN US2003125270-A1.
XX PD 03-JUL-2003.
XX PF 18-DEC-2000; 2000US-00740332.
XX PR 18-DEC-2000; 2000US-00740332.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX PT Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX PS Claim 1; SEQ ID NO 4758; 198pp; English.
XX CC The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents an anti-HCV molecule target
XX sequence.
XX SQ Sequence 15 BP; 4 A; 3 C; 4 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.8; DB 1; Length 15;
XX Best Local Similarity 86.7%; Pred. No. 1.1e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 9 ACTGGTTCAAGTCGT 23
XX DB 15 ACAGGTTCAACTCGT 1
XX
XX RESULT 129
XX ABF76366/C
XX ID ABF76366 standard; DNA; 13 BP.
XX AC ABF76366;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 176363 for detecting SNP TSC0043771.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 176363; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The

```

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 7 G; 3 T; 0 U; 1 Other;

Query Match 15.1%; Score 11.6; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 94;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCA 67
Db 13 RCCCCTTAACCA 2

RESULT 130
ABF76367
ID ABF76367 standard; DNA; 13 BP.
AC
XX ABF76367;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 176364 for detecting SNP TSC0043771.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 176364; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 7 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 15.1%; Score 11.6; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 94;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 7 G; 3 T; 0 U; 1 Other;

Query Match 15.1%; Score 11.6; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 94;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCA 67
Db 13 RCCCCTTAACCA 2

RESULT 131
ABC03832/c
ID ABC03832 standard; DNA; 13 BP.
XX
AC ABC03832;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 3823 for detecting SNP TSC0001459.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 3823; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAC 70
Db 13 CCCTTAACCAAC 1

RESULT 132
ABH28932/c
ID ABH28932 standard; DNA; 13 BP.
XX
AC ABH28932;
XX
DT 22-FEB-2002 (first entry)
XX

Qy 56 GCCCCTTAACCA 67
Db 13 RCCCCTTAACCA 12

RESULT 131
ABC03832/c
ID ABC03832 standard; DNA; 13 BP.
XX
AC ABC03832;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 3823 for detecting SNP TSC0001459.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 3823; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAC 70
Db 13 CCCTTAACCAAC 1

RESULT 132
ABH28932/c
ID ABH28932 standard; DNA; 13 BP.
XX
AC ABH28932;
XX
DT 22-FEB-2002 (first entry)
XX

PS Claim 1; SEQ ID NO 228910; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

XX Query Match 14.8%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1e+02; 1; Indels 0; Gaps 0;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 60 CTTAACCAACGT 72
DB 1 CATAACCAACGT 13

RESULT 135
ABF25293
ID ABF25293 standard; DNA; 13 BP.
XX AC
AC ABF25293;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 125290 for detecting SNP TSC0031303.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 125290; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

XX Query Match 14.8%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1e+02; 1; Indels 0; Gaps 0;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 60 CTTAACCAACGT 72
DB 1 CATAACCAACGT 13

RESULT 135
ABF25293
ID ABF25293 standard; DNA; 13 BP.
XX AC
AC ABF25293;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 125290 for detecting SNP TSC0031303.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 125290; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

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RESULT 137
AAT52258
ID AAT52258 standard; RNA; 15 BP.
XX
AC AAT52258;
XX
XX 25-MAR-2003 (revised)
DT 01-APR-1997 (first entry)
XX
XX Mouse ICAM hammerhead ribozyme target sequence (nt. position 765).
DE
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Mus musculus.
OS
XX
XX WO9523225-A2.
PN
XX
XX 31-AUG-1995.
PD
XX
XX 23-FEB-1995; 95WO-IB000156.
PF
XX
XX 23-FEB-1994; 94US-00201109.
PR
XX 29-MAR-1994; 94US-00218934.
PR
XX 04-APR-1994; 94US-00222795.
PR
XX 07-APR-1994; 94US-00224483.
PR
XX 15-APR-1994; 94US-00227958.
PR
XX 15-APR-1994; 94US-00228041.
PR
XX 18-MAY-1994; 94US-00245736.
PR
XX 06-JUL-1994; 94US-00271280.
PR
XX 15-AUG-1994; 94US-00291433.
PR
XX 16-AUG-1994; 94US-00291433.
PR
XX 17-AUG-1994; 94US-00293520.
PR
XX 19-AUG-1994; 94US-00293520.
PR
XX 02-SEP-1994; 94US-00293520.
PR
XX 08-SEP-1994; 94US-00303039.
PR
XX 23-SEP-1994; 94US-00311486.
PR
XX 23-SEP-1994; 94US-00311486.
PR
XX 28-SEP-1994; 94US-00314397.
PR
XX 03-OCT-1994; 94US-00319492.
PR
XX 07-OCT-1994; 94US-00321993.
PR
XX 11-OCT-1994; 94US-00334847.
PR
XX 04-NOV-1994; 94US-00334847.
PR
XX 10-NOV-1994; 94US-00337608.
PR
XX 28-NOV-1994; 94US-00345516.
PR
XX 16-DEC-1994; 94US-00357577.
PR
XX 23-DEC-1994; 94US-00363233.
PR
XX 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpelisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Belgelman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Uman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
XX in inhibiting disease related genes.
XX
XX Claim 2; Page 177; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an

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CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX SQ Sequence 15 BP; 1 A; 7 C; 3 G; 0 T; 4 U; 0 Other;
Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 1.3e+02;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 18 AGTCGTCGCTTC 30
DB 2 AGUGUCCGCUUC 14
XX
RESULT 138
AAT52197
ID AAT52197 standard; RNA; 15 BP.
XX
XX AC AAT52197;
XX
XX 25-MAR-2003 (revised)
DT 01-APR-1997 (first entry)
XX
XX Mouse ICAM hammerhead ribozyme target sequence (nt. position 146).
DE
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Mus musculus.
OS
XX
XX WO9523225-A2.
PN
XX
XX 31-AUG-1995.
PD
XX
XX 23-FEB-1995; 95WO-IB000156.
PF
XX
XX 23-FEB-1994; 94US-00201109.
PR
XX 29-MAR-1994; 94US-00218934.
PR
XX 04-APR-1994; 94US-00222795.
PR
XX 07-APR-1994; 94US-00224483.
PR
XX 15-APR-1994; 94US-00227958.
PR
XX 15-APR-1994; 94US-00228041.
PR
XX 18-MAY-1994; 94US-00245736.
PR
XX 06-JUL-1994; 94US-00271280.
PR
XX 15-AUG-1994; 94US-00291433.
PR
XX 16-AUG-1994; 94US-00291433.
PR
XX 17-AUG-1994; 94US-00293520.
PR
XX 19-AUG-1994; 94US-00293520.
PR
XX 02-SEP-1994; 94US-00293520.
PR
XX 08-SEP-1994; 94US-00303039.
PR
XX 23-SEP-1994; 94US-00311486.
PR
XX 23-SEP-1994; 94US-00311486.
PR
XX 28-SEP-1994; 94US-00314397.
PR
XX 03-OCT-1994; 94US-00319492.
PR
XX 07-OCT-1994; 94US-00321993.
PR
XX 11-OCT-1994; 94US-00334847.
PR
XX 04-NOV-1994; 94US-00334847.
PR
XX 10-NOV-1994; 94US-00337608.
PR
XX 28-NOV-1994; 94US-00345516.
PR
XX 16-DEC-1994; 94US-00357577.
PR
XX 23-DEC-1994; 94US-00363233.
PR
XX 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpelisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Belgelman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Uman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
XX in inhibiting disease related genes.
XX
XX Claim 2; Page 177; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an

```

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PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX (RIBO-) RIBOZYME PHARM INC.
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LM;
PI Grimm S, Karpeisky A, Ksiech K, Matulic-Adamic J, Mowiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Uman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX Ribozyms having modified bases and methods for producing them - for use
XX in inhibiting disease related genes.
XX Claim 2; Page 177; 407pp; English.
XX The present sequence represents a preferred target sequence for an
XX enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
XX nucleotide base position indicated in the DE line. Regions of the mRNA
XX that do not form secondary folding structures and that contain potential
XX hammerhead and hairpin ribozyme cleavage sites were identified by
XX computer analysis. Ribozymes directed against these mRNA sequences were
XX designed and synthesised with modifications that improve their nuclease
XX resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
XX inhibit ICAM-1 expression, making them useful for reducing transplant
XX rejection and alleviating symptoms in patients with rheumatoid arthritis,
XX asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
XX correct PI field.)
SQ Sequence 15 BP; 1 A; 7 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 1.3e+02;
Matches 8; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

OY 18 AGTCGTCGCTTC 30
DB 2 AGUCGUCGCUUC 14
|||:|:|:|:|:|
|||:|:|:|:|:|

RESULT 139
AAF52741
ID AAF52741 standard; DNA; 15 BP.
XX AAF52741;
XX 30-MAR-2001 (first entry)
XX IGF-I oligonucleotide #3701.
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX Homo sapiens.
XX WO200078341-A1.
XX 28-DEC-2000.
XX 21-JUN-2000; 2000WO-AU000693.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX

PR 21-JUN-1999; 99US-0140345P.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX Example 8; Page 85; 201pp; English.
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 1.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 16 CAAGTCGTCGCT 28
DB 3 CAAGTCCTCGCT 15
|||||:|:|:|:|:|
|||||:|:|:|:|:|

RESULT 140
AAF51764
ID AAF51764 standard; DNA; 15 BP.
XX AAF51764;
XX 30-MAR-2001 (first entry)
XX IGF-I oligonucleotide #2724.
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX Homo sapiens.
XX WO200078341-A1.
XX 28-DEC-2000.
XX 21-JUN-2000; 2000WO-AU000693.
XX 21-JUN-1999; 99US-0140345P.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX

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PI Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX Example 8; Page 78; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX Sequence 15 BP; 6 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
SQ
Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 1.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 42 ACCGGCTAAAGCC 54
Db 3 ACCGGCTAAAGCC 15
|||||
|

RESULT 141
AAF51768
ID AAF51768 standard; DNA; 15 BP.
XX
XX AAF51768;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #2728.
XX
XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX Example 8; Page 78; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX Sequence 15 BP; 6 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
SQ
Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 1.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 44 CCGGCTAAAGCCGG 56
Db 1 CCGGCTAAAGCCGG 13
|||||
|

RESULT 142
AAF52746
ID AAF52746 standard; DNA; 15 BP.
XX
XX AAF52746;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #3706.
XX
XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.

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XX PS Example 8; Page 85; 201pp; English.
XX CC
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX CC
XX CC Sequence 15 BP; 0 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX CC
XX CC Query Match 14.8%; Score 11.4; DB 1; Length 15;
XX CC Best Local Similarity 92.3%; Pred. No. 1.3e+02;
XX CC Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX CC
Qy 19 GTCGTCGCTTCG 31
Db 1 GTCCTTCGCTTCG 13

RESULT 143
AAH46687/c
ID AAH46687 standard; DNA; 15 BP.
AC AAH46687;
XX CC
XX CC 19-SEP-2001 (first entry)
XX CC
XX CC Target virus detection probe #8.
XX CC
XX CC Target virus detection probe; FRET; labelled probe;
XX CC fluorescence resonance energy transfer; ss.
XX CC
XX CC Synthetic.
XX CC
XX CC Key Location/Qualifiers
XX CC modified_base 11
XX CC /*tag= a
XX CC /mod_base= OTHER
XX CC /note= "modified by Cy5"
XX CC
XX CC JP2000312589-A.
XX CC
XX CC 14-NOV-2000.
XX CC
XX CC 16-JUL-1999; 99JP-00203474.
XX CC
XX CC 04-MAR-1999; 99JP-00057132.
XX CC
XX CC (BUNS-) BUNSHI BIOHOTOONICS KENKYUSHO KK.
XX CC
XX CC WPI; 2001-400707/43.
XX CC
XX CC Detecting a virus comprises a probe formed between at least two same
XX CC energy donor fluorescent pigments (dfp) and an energy acceptor
XX CC fluorescent pigment (afp) in which the energy from (dfp) is relayed to
XX CC (afp) successively and transferred.
XX CC
XX CC Disclosure; Page 9; 40pp; Japanese.
XX CC
XX CC The present invention describes a method of detecting a target virus
XX CC using fluorescence resonance energy transfer (FRET), involving reacting
XX CC with a labelled probe formed between at least two same energy donor
XX CC

CC fluorescent pigments and an energy acceptor fluorescent pigment in which
CC the energy from the former is relayed to the latter successively and
CC transferred. The probe can be used for the detection of a target virus.
CC The present sequence is a probe described in the exemplification of the
CC invention
XX CC
XX CC Sequence 15 BP; 3 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
XX CC
XX CC Query Match 14.8%; Score 11.4; DB 1; Length 15;
XX CC Best Local Similarity 92.3%; Pred. No. 1.3e+02;
XX CC Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX CC
Qy 63 AACCAACGTTAG 75
Db 14 AACCAACGTTAG 2

RESULT 144
AAK98689
ID AAK98689 standard; DNA; 15 BP.
XX CC
XX CC AAK98689;
XX CC
XX CC 19-APR-2002 (first entry)
XX CC
XX CC DNA mutagenesis method gapped duplex oligonucleotide #6.
XX CC
XX CC DNA mutagenesis; DNA replication; UmuD'; RecA; SSB protein;
XX CC trans-lesion replicating DNA polymerase; forensic; UmuC; ds.
XX CC
XX CC Synthetic.
XX CC
XX CC US6333178-B1.
XX CC
XX CC 25-DEC-2001.
XX CC
XX CC 12-SEP-2000; 2000US-00660552.
XX CC
XX CC 30-JUL-1999; 99US-0146162P.
XX CC
XX CC 27-JUL-2000; 2000US-00627399.
XX CC
XX CC (YEDA ) YEDA RES & DEV CO LTD.
XX CC
XX CC Livneh Z, Reuven NB, Tomer G;
XX CC
XX CC WPI; 2002-153822/20.
XX CC
XX CC Replication of damaged DNA, useful e.g. for forensic studies, using a
XX CC trans-lesion replicating polymerase, also useful for mutagenesis.
XX CC
XX CC Example 1; Col 14; 68pp; English.
XX CC
XX CC The present invention relates to a method for the replication of a DNA
XX CC molecule, which has at least one sites of lesion damage, by treatment
XX CC with (i) a trans-lesion replicating DNA polymerase, (ii) mixture of
XX CC UmuD', RecA and SSB (single-strand binding) proteins, (iii) nucleoside 5'-
XX CC -triphosphates and (iv) divalent metal ions. The method can be used for
XX CC the replication of damaged DNA, especially ancient DNA or, for forensic
XX CC purposes, DNA from blood stains that have been exposed to sunlight or
XX CC oxidation, also for mutagenesis of DNA, including incorporation of non-
XX CC natural bases, e.g. for labeling or detection. The present sequence is an
XX CC oligonucleotide used to produce a gapped duplex for use as described in
XX CC the exemplification of the invention
XX CC
XX CC Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX CC
XX CC Query Match 14.8%; Score 11.4; DB 1; Length 15;
XX CC Best Local Similarity 92.3%; Pred. No. 1.3e+02;
XX CC Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX CC
Qy 10 CTGTTCAAGTCG 22
Db 1 CTGTTCAAGTAG 13

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RESULT 145
AAK98686
ID AAK98686 standard; DNA; 15 BP.
XX
XX AC AAK98686;
XX
XX DT 19-APR-2002 (first entry)
XX
XX DNA mutagenesis method gapped duplex oligonucleotide #3.
XX
XX DNA mutagenesis; DNA replication; UmuD'; RecA; SSB protein;
XX trans-lesion replicating DNA polymerase; forensic; UmuC; ds.
XX
XX OS Synthetic.
XX
XX PN US6333178-B1.
XX
XX PD 25-DEC-2001.
XX
XX PF 12-SEP-2000; 2000US-00660552.
XX
XX PR 30-JUL-1999; 99US-0146162P.
XX
XX PR 27-JUL-2000; 2000US-00627399.
XX
XX PA (YEDA ) YEDA RES & DEV CO LTD.
XX
XX PI Livneh Z, Reuven NB, Tomer G;
XX
XX DR WPI; 2002-153822/20.
XX
XX PT Replication of damaged DNA, useful e.g. for forensic studies, using a
XX trans-lesion replicating polymerase, also useful for mutagenesis.
XX
XX PS Example 1; Col 14; 68pp; English.
XX
XX CC The present invention relates to a method for the replication of a DNA
XX molecule, which has at least one sites of lesion damage, by treatment
XX with (i) a trans-lesion replicating DNA polymerase, (ii) mixture of
XX UmuD', RecA and SSB (single-strand binding) proteins, (iii) nucleoside 5'-
XX triphosphates and (iv) divalent metal ions. The method can be used for
XX the replication of damaged DNA, especially ancient DNA or, for forensic
XX purposes, DNA from blood stains that have been exposed to sunlight or
XX oxidation, also for mutagenesis of DNA, including incorporation of non-
XX natural bases, e.g. for labeling or detection. The present sequence is an
XX oligonucleotide used to produce a gapped duplex for use as described in
XX the exemplification of the invention
XX
XX SQ Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 14.8%; Score 11.4; DB 1; Length 15;
XX Best Local Similarity 92.3%; Pred. No. 1.3e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 10 CTGGTTCAGTCG 22
XX | | | | | | | |
XX 1 CTGGTTCAGTAC 13
XX
XX RESULT 146
AAD26855/c
ID AAD26855 standard; DNA; 15 BP.
XX
XX AC AAD26855;
XX
XX DT 26-MAR-2002 (first entry)
XX
XX DE Human GPR4 gene polymorphism detecting ASO primer #14.
XX
XX KW Human; G-protein coupled receptor 4; GPR4; haplotyping; polymorphism;
XX allele-specific oligonucleotide; ASO; primer; ss.
XX

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OS Homo sapiens.
XX
XX PN WO200187904-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 09-MAY-2001; 2001WO-US015097.
XX
XX PR 17-MAY-2000; 2000US-0204928P.
XX
XX PA (GENA-) GENAISANCE PHARM INC.
XX
XX PI Bentivegna SC, Duda AE, Kazemi A, Koshy B;
XX
XX DR WPI; 2002-097579/13.
XX
XX PT Haplotyping, (H1), the G-protein coupled receptor 4 (GPR4) gene of an
XX individual, comprising determining which haplotype an individual.
XX
XX PS Claim 15; Page 13; 61pp; English.
XX
XX CC The invention relates to G-protein coupled receptor 4 (GPR4) gene
XX variants. The data about the GPR4 polynucleotides and polypeptides and
XX the polymorphisms associated with them are useful for haplotyping at the
XX GPR4 locus. Allele-specific oligonucleotide (ASO) is useful as probes and
XX primers for assaying a polymorphism in GPR4 gene. The present sequence is
XX an ASO primer used to detect human GPR4 gene polymorphism
XX
XX SQ Sequence 15 BP; 3 A; 3 C; 7 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 14.8%; Score 11.4; DB 1; Length 15;
XX Best Local Similarity 80.0%; Pred. No. 1.3e+02;
XX Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 27 CTTGCTCCTCCTCGG 41
XX | : | | | | | | | |
XX 15 CTTGCTCCTCCTCGG 1
XX
XX Db
XX
XX RESULT 147
AAS19789
ID AAS19789 standard; DNA; 15 BP.
XX
XX AC AAS19789;
XX
XX DT 08-MAY-2002 (first entry)
XX
XX DE ASO primer #47 to detect human RANGAP1 gene polymorphisms.
XX
XX KW Human; single nucleotide polymorphism; SNP; RANGAP1;
XX haplotyping chromosome 22q13.2-q13.31; Ran GTPase activating protein 1;
XX genotyping; cancer; irregular cell cycle associated disorder; ASO;
XX primer; ss; allele-specific oligonucleotide.
XX
XX OS Homo sapiens.
XX
XX PN WO200179240-A2.
XX
XX PD 25-OCT-2001.
XX
XX PF 17-APR-2001; 2001WO-US012455.
XX
XX PR 17-APR-2000; 2000US-0198072P.
XX
XX PA (GENA-) GENAISANCE PHARM INC.
XX
XX PI Chew A, Choi JY, Koshy B;
XX
XX DR WPI; 2002-075068/10.
XX
XX PT Genotyping human Ran GTPase activating protein 1 gene of individual for
XX determining haplotype of individual, involves determining identity of
XX nucleotide pair at specific polymorphic sites for two copies of the gene.
XX

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PS Claim 15; Page 15; 148pp; English.

XX The present invention relates to novel single nucleotide polymorphisms (SNPs) in the human Ran GTPase activating protein 1 (RANGAP1) gene located on chromosome 22q13.2-q13.31, and methods for haplotyping and/or genotyping the RANGAP1 gene. The methods of the invention make use of allele-specific oligonucleotides (ASOs) as probes and primers and/or primer-extension oligonucleotides for detecting the RANGAP1 gene polymorphisms. The polynucleotides and screened compounds are useful for treatment of diseases associated with RANGAP1 activity, such as cancer and other disorders associated with an irregular cell cycle. AAS19743-AAS19820 represent ASO primers for detecting human RANGAP1 gene polymorphisms

XX Sequence 15 BP; 2 A; 6 C; 2 G; 4 T; 0 U; 1 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 1.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 32 CTCACCTCGGACC 44
Db 1 CTCACCTCGGACC 13

RESULT 148
AAS16735
ID AAS16735 standard; DNA; 15 BP.
AC AAS16735;
XX AAS16735;
XX 14-FEB-2002 (first entry)
DT Human APOA4 allele specific oligonucleotide, ASO, PCR primer #8.
DE Human; ss; APOA4; apolipoprotein A-IV; antiatherosclerotic; cardiand;
KW haplotype; chromosome 11q23-qter; coronary heart disease; obesity;
KW atherosclerosis; PCR primer.
XX Homo sapiens.
XX WO200177124-A2.
XX 18-OCT-2001.
XX 03-APR-2001; 2001WO-US010670.
XX 05-APR-2000; 2000US-0194362P.
XX (GENA-) GENAISSANCE PHARM INC.
XX Bentivegna SC, Choi JY, Klien SE, Koshy B;
XX WPI; 2002-041281/05.
XX New haplotypes of the human apolipoprotein A-IV gene, useful to diagnose and treat disorders associated with its abnormal expression or function such as coronary artery disease.
XX Claim 16; Page 15; 71pp; English.

XX The invention relates to haplotyping the human apolipoprotein A-IV (APOA4) gene of an individual, comprising determining if the individual has one of the APOA4 haplotypes or haplotype pairs fully defined in the specification. Also disclosed are genotyping oligonucleotides (or allele specific oligonucleotides, ASO) as well as methods for correlating a particular haplotype pair with a trait e.g. obesity, in a population. The APOA4 gene is located on chromosome 11q23-qter. The methods of the invention are useful to diagnose and develop treatment for disorders associated with abnormal APOA4 expression or function, for example coronary heart disease and atherosclerosis. The APOA4 isogenes and screened compounds are useful for the treatment of disorders associated

CC with abnormal APOA4 expression or function such as coronary artery disease. The present sequence is an APOA4 allele specific oligonucleotide, ASO, PCR primer used to detect an APOA4 polymorphism

XX Sequence 15 BP; 2 A; 7 C; 4 G; 1 T; 0 U; 1 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.3e+02;
Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 51 AGCGGGCCCTTAAC 65
Db 1 AGCGGGCCCTCARC 15

RESULT 149
AAX17954/c
ID AAX17954 standard; cDNA; 16 BP.
XX AAX17954;
AC AAX17954;
XX 11-MAY-1999 (first entry)
DT Triplet repeat sequence PCR primer #4.
DE Primer; PCR; amplification; triplet repeat; spinobulbar atrophy;
KW myotonic dystrophy; spinocerebellar ataxia; Huntington's disease;
KW fragile X syndrome; Behcet's disease; diagnosis; ss.
XX Synthetic.
XX WO9856950-A1.
XX 17-DEC-1998.
XX 10-JUN-1998; 98WO-FR001187.
XX 11-JUN-1997; 97FR-00007225.
XX (DAUS-) FOND DAUSSET-CEPH JEAN.
XX Neri C, Cann HM;
XX WPI; 1999-070334/06.
XX DNA sequences rich in repeated nucleotide triplets - used for the diagnosis and prognosis of diseases associated with trinucleotide repeats.
XX Claim 5; Page 11; 30pp; French.

XX Primers AAX17951-X17974 are used to PCR amplify sequences containing the triplet repeat sequences CAG/CTG or CGG/GCC. The amplified sequences can be compared to sequences from a patient to determine presence of additional trinucleotide repeats (TNR), specifically for assessing the risk of developing a TNR-related disease (e.g. spinobulbar atrophy; myotonic dystrophy; spinocerebellar ataxia; Huntington's disease; fragile X syndrome or Behcet's disease). The method is especially useful for early diagnosis or specific monitoring, but if the disease is associated with a relatively small variation in the number of repeats, it may also be used to predict the onset of disease and/or its severity

XX Sequence 16 BP; 6 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 14.8%; Score 11.4; DB 1; Length 16;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 13 GTTCAAGTCGTTTC 25
Db 14 GTTCAGTCGTTTC 2

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RESULT 150
AAS56734/C
ID AAS56734 standard; RNA; 16 BP.
XX
AC AAS56734;
XX
DT 16-JAN-2002 (first entry)
XX
DE BR1 ribozyme sequence tag RNA #3.
XX
XX Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;
KW cytosolic; RNA cleavage; tumour suppressor; PCR primer: CHLR2; AF6; BR2;
KW inhibitor dominant negative 4; breast basic conserved protein 1; BBC1;
KW BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
XX
XX Homo sapiens.
OS
XX WO200170982-A2.
XX
XX 27-SEP-2001.
XX
XX 23-MAR-2001; 2001WO-US009559.
XX
XX 23-MAR-2000; 2000US-00536058.
XX
XX (IMMU-) IMMUSOL INC.
XX (BEGE/) BEGER C.
XX
XX Begger C, Barber J, Wong-Staal F;
XX
XX WPI; 2001-611503/70.
XX
XX Novel polypeptides that are the regulators of BRCA-1, useful for treating
XX cancer and diagnosing the presence of neoplastic cells in biological
XX sample.
XX
XX Claim 12; Page 74; 97pp; English.
XX
XX Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators,
CC ribozyme target recognition RNA sequences, DNA fragments encoding the RNA
CC and primers used in the methods of the invention. Hybridisation of
CC ribozymes to their targets results in cleavage of the RNA target. The
CC ribozymes can be used to cleave regulators of the tumour suppressor BRCA-
CC 1, resulting in upregulation or downregulation of BRCA-1 in a cell. The
CC mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor
CC dominant negative 4 (ID4), breast basic conserved protein 1 (BBC1),
CC CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and
CC diagnosing cancer and other proliferative disorders. The severity of an
CC incidence of cancer can be lessened by regulating tumour proliferation
CC through modulation of BRCA-1 expression. The sequences of the invention
CC are useful in the development of anti-cancer drugs
XX
XX Sequence 16 BP; 6 A; 1 C; 7 G; 0 T; 2 U; 0 Other;
SQ
Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 24 TCGCTTCGCTCACATCG 39
   ||||| |||||
Db 16 TCCCTTCTCTACATAG 1

RESULT 151
ABS73993/C
ID ABS73993 standard; DNA; 16 BP.
XX
XX ABS73993;
AC
XX 09-DEC-2002 (first entry)
DT
XX Interleukin-3 mutant-associated DNA sequence #18.
DE
XX

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KW Interleukin-3; IL-3; ds; haematopoietic cell; haematopoietic disorder;
KW acute myelogenous leukaemia; AML; bone marrow transplant; neutropaenia;
KW thrombocytopaenia; aplastic anaemia; Chediak-Higashi syndrome;
KW systemic lupus erythematosus; leukaemia; myelodysplastic syndrome;
KW myelofibrosis; viral infection; microbial infection; parasitic infection;
KW stem cell; immune deficiency; immune disorder; rheumatoid arthritis;
KW leukopaenia.
XX
XX Unidentified.
OS
XX US6440407-B1.
XX
XX 27-AUG-2002.
XX
XX 09-DEC-1996; 96US-00764114.
XX
XX 24-NOV-1992; 92US-00981044.
XX 22-NOV-1993; 93WO-US011197.
XX 06-APR-1995; 95US-00411795.
XX
XX (SEAR/) SEARLE G D.
XX
XX Bauer SC, Abrams MA, Braford-Goldberg SR, Caparon MH, Easton AM;
XX Klein BK, McKearn JP, Olins PO, Paik K, Thomas JW;
XX WPI; 2002-711523/77.
XX
XX Ex vivo expansion of stem cells e.g. hematopoietic stem cells for use in
XX treating hematopoietic disorders, comprises culturing the cells in medium
XX having human interleukin-3 mutant polypeptide and harvesting cultured
XX cells.
XX
XX Disclosure; Col 135; 215pp; English.
XX
XX The invention relates to ex vivo expansion of stem cells, comprises
XX culturing stem cells with a growth medium comprising a human interleukin-
XX 3 (IL-3) mutant polypeptide or a polypeptide comprising an N-terminal
XX methionine residue, alanine residue or methionine-alanine di-peptide
XX preceding the IL-3 sequence, and harvesting the cultured stem cells. Also
XX include are enhancing the efficiency of the transduction of cultured stem
XX cells by a heterologous gene, comprising: (a) culturing the stem cells
XX with a growth medium comprising IL-3; (b) transducing DNA into cultured
XX cells; and (c) harvesting the transduced cells; and treating a patient
XX having a hematopoietic disorder comprising: (a) removing stem cells from
XX a patient or a blood donor; (b) performing the method of the invention;
XX and (c) transplanting the cultured stem cells into the patient. The
XX method is useful for ex vivo expansion of stem cells. The two other new
XX methods are useful for enhancing the efficiency of transduction of
XX cultured stem cells by a heterologous gene, and treating a patient having
XX a haematopoietic disorder, respectively. The expanded hematopoietic cells
XX are also useful in the treatment of cyclic neutropaenia, aplastic
XX anaemia, thrombocytopaenia, idiopathic neutropaenia, Chediak-Higashi
XX syndrome, systemic lupus erythematosus (SLE), leukaemia, myelodysplastic
XX syndrome, leukopaenia and myelofibrosis, and also for treating various
XX immune deficiencies caused as a result of viral infections or immune
XX disorders e.g. rheumatoid arthritis. The expanded cells are further
XX useful for preventing or treating bone marrow suppression or
XX hematopoietic deficiencies which occur as a result of viral, microbial or
XX parasitic infections. Treatment of leukopaenia with the expanded
XX hematopoietic cells avoids undesirable side effects caused by treatment
XX with current drugs. The present sequence is an IL-3-associated DNA
XX sequence which is included in the sequence listing but is not referred to
XX anywhere else in the specification
XX
XX Sequence 16 BP; 5 A; 3 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 14.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CCTAACAACTGGTTCA 17
   ||||| |||||
Db 16 CCTGACATATGGTTCA 1

```

RESULT 152
 ABS74091/C
 ID ABS74091 standard; DNA; 16 BP.
 XX
 AC ABS74091;
 XX
 DT 09-DEC-2002 (first entry)
 XX
 DE Interleukin-3 mutant-associated DNA sequence #115.
 XX
 KW Interleukin-3; IL-3; ds; haematopoietic cell; haematopoietic disorder;
 KW acute myelogenous leukaemia; AML; bone marrow transplant; neutropenia;
 KW thrombocytopenia; aplastic anaemia; Chediak-Higashi syndrome;
 KW systemic lupus erythematosus; leukaemia; myelodysplastic syndrome;
 KW myelofibrosis; viral infection; microbial infection; parasitic infection;
 KW stem cell; immune deficiency; immune disorder; rheumatoid arthritis;
 KW leukaemia.
 XX
 OS Unidentified.
 XX
 PN US6440407-B1.
 XX
 PD 27-AUG-2002.
 XX
 PF 09-DEC-1996; 96US-00764114.
 XX
 PR 24-NOV-1992; 92US-00981044.
 PR 22-NOV-1993; 93WO-US011197.
 PR 06-APR-1995; 95US-00411795.
 XX
 PA (SEAR/) SEARLE G D.
 XX
 PI Bauer SC, Abrams MA, Braford-Goldberg SR, Caparon MH, Easton AM;
 PI Klein BK, McKearn JP, Olins P, Paik K, Thomas JW;
 XX
 DR WPI; 2002-711523/77.
 XX
 Ex vivo expansion of stem cells e.g. hematopoietic stem cells for use in
 treating hematopoietic disorders, comprises culturing the cells in medium
 having human interleukin-3 mutant polypeptide and harvesting cultured
 cells.
 XX
 PS Disclosure; Col 233; 215pp; English.
 XX
 The invention relates to ex vivo expansion of stem cells, comprises
 culturing stem cells with a growth medium comprising a human interleukin-
 3 (IL-3) mutant polypeptide or a polypeptide comprising an N-terminal
 methionine residue, alanine residue or methionine-alanine di-peptide
 preceding the IL-3 sequence, and harvesting the cultured stem cells. Also
 include are enhancing the efficiency of the transduction of cultured stem
 cells by a heterologous gene, comprising: (a) culturing the stem cells
 with a growth medium comprising IL-3; (b) transducing DNA into cultured
 cells; and (c) harvesting the transduced cells; and treating a patient
 having a hematopoietic disorder comprising: (a) removing stem cells from
 a patient or a blood donor; (b) performing the method of the invention;
 and (c) transplanting the cultured stem cells into the patient. The
 method is useful for ex vivo expansion of stem cells. The two other new
 methods are useful for enhancing the efficiency of transduction of
 cultured stem cells by a heterologous gene, and treating a patient having
 a hematopoietic disorder, respectively. The expanded hematopoietic cells
 are also useful in the treatment of cyclic neutropenia, aplastic
 anaemia, thrombocytopenia, idiopathic neutropenia, Chediak-Higashi
 syndrome, systemic lupus erythematosus (SLE), leukaemia, myelodysplastic
 syndrome, leukopenia and myelofibrosis, and also for treating various
 immune deficiencies caused as a result of viral infections or immune
 disorders e.g. rheumatoid arthritis. The expanded cells are further
 useful for preventing or treating bone marrow suppression or
 hematopoietic deficiencies which occur as a result of viral, microbial or
 parasitic infections. Treatment of leukopenia with the expanded
 hematopoietic cells avoids undesirable side effects caused by treatment
 with current drugs. The present sequence is an IL-3-associated DNA

CC sequence which is included in the sequence listing but is not referred to
 CC anywhere else in the specification
 XX
 SQ Sequence 16 BP; 5 A; 3 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 14.5%; Score 11.2; DB 1; Length 16;
 Best Local Similarity 81.2%; Pred. No. 1.5e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Oy 2 CCTAACAACTGGTTCA 17
 Db 16 CCTGACATATGGTTCA 1
 RESULT 153
 ADC02569/C
 ID ADC02569 standard; DNA; 16 BP.
 XX
 AC ADC02569;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Ex vivo stem-cell expansion related polynucleotide #17.
 XX
 KW cytostatic; antianaemic; immunomodulator; immunostimulant;
 KW immunosuppressive; antiinflammatory; interleukin agonist 3;
 KW interleukin antagonist 3; Gene therapy; ex vivo expansion of stem cell;
 KW modified human interleukin-3; cell proliferation;
 KW acute myelogenous leukaemia cell proliferation; TF-1 cell proliferation;
 KW methylcellulose assay; haematopoietic disorder; cancer;
 KW acute myelogenous leukaemia; B lymphoid cancer; leukopenia; neutropenia;
 KW aplastic anaemia; Chediak-Higashi's syndrome;
 KW systemic lupus erythematosus; myelodysplastic syndrome; myelofibrosis;
 KW bone marrow; blood cell activation; blood cell growth; ds.
 XX
 OS Synthetic.
 XX
 PN US6479261-B1.
 XX
 PD 12-NOV-2002.
 XX
 PF 15-NOV-1995; 95US-00559390.
 XX
 PR 24-NOV-1992; 92US-00981044.
 PR 22-NOV-1993; 93WO-US011198.
 PR 06-APR-1995; 95US-00411796.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Bauer SC, Abrams MA, Braford-Goldberg SR, Caparon MH, Easton AM;
 PI Klein BK, McKearn JP, Olins P, Paik K, Polazzi J, Thomas JW;
 XX
 DR WPI; 2003-655574/62.
 XX
 Selective ex vivo expansion of stem cells, useful for treating a patient
 having hematopoietic disorder, e.g. leukemia, neutropenia or aplastic
 anemia, comprises using recombinant human interleukin-3 variant or mutant
 proteins.
 XX
 Example 54; SEQ ID NO 29; 288pp; English.
 XX
 The invention describes selective ex vivo expansion of stem cells
 comprising separating stem cells from other cells, culturing the cells
 with modified human interleukin-3 polypeptide with at least 3 times
 greater cell proliferative activity than native human interleukin-3 in at
 least one assay selected from the group of acute myelogenous leukaemia
 cell proliferation, TF-1 cell proliferation, and methylcellulose assay,
 and harvesting the cultured cells. The method is useful for selective ex
 vivo expansion of stem cells. The recombinant human interleukin-3 variant
 or mutant proteins are useful for treating a patient having a
 haematopoietic disorder, such as cancer (e.g. acute myelogenous leukaemia
 or certain types of B lymphoid cancers), leukopenia, neutropenia,
 or aplastic anaemia, Chediak-Higashi's syndrome, systemic lupus

CC erythematosis, myelodysplastic syndrome, or myelofibrosis. The
 CC interleukin-3 muteins are also useful as antagonists for producing
 CC antibodies used in immunoassay and immunotherapy protocols, or for
 CC stimulating bone marrow and blood cell activation and growth before
 CC infusion into patients. This sequence represents an ex vivo stem cell
 CC expansion method associated polynucleotide.
 XX
 SQ Sequence 16 BP; 5 A; 3 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 14.5%; Score 11.2; DB 1; Length 16;
 Best Local Similarity 81.2%; Pred. No. 1.5e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX
 AC ADC02142;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Ex vivo stem cell expansion related polynucleotide #116.
 XX
 KW antianaemic; immunomodulator; dermatological; antiinflammatory;
 KW immunosuppressive; cytostatic; haemostatic; antirheumatic; antiarthritic;
 KW osteopathic; gene therapy; cell therapy; ex vivo expansion; stem cell;
 KW human interleukin-3 mutant; hIL-3 mutant; haematopoietic disorder;
 KW aplastic anaemia; Chediak-Higashi syndrome; systemic lupus erythematosus;
 KW leukaemia; myelodysplastic syndrome; myelofibrosis; neutropenia;
 KW thrombocytopenia; radiation; chemotherapy; bone marrow suppression;
 KW haematopoietic deficiency; azidothymidine; AZT; alkylating agent;
 KW chloramphenicol; rheumatoid arthritis; immune disorder; infection; ds.
 XX
 OS Synthetic.
 XX
 PN US2003103936-A1.
 XX
 PD 05-JUN-2003.
 XX
 PF 04-MAR-2002; 2002US-00090182.
 XX
 PR 24-NOV-1992; 92US-00981044.
 PR 22-NOV-1993; 93WO-US011197.
 PR 06-APR-1995; 95US-00411795.
 PR 09-DEC-1996; 96US-00764114.
 XX
 PA (BAUE/) BAUER S C.
 PA (ABRA/) ABRAMS M A.
 PA (BRAE/) BRAFORD-GOLDBERG S R.
 PA (CAPA/) CAPARON M H.
 PA (EAST/) EASTON A M.
 PA (KLEI/) KLEIN B K.
 PA (MCKE/) MCKEARN J P.
 PA (OLIN/) OLINS P O.
 PA (PAIK/) PAIK K.
 PA (THOM/) THOMAS J W.
 XX
 PI Baur SC, Abrams MA, Braford-Goldberg SR, Caparon MH, Easton AM;
 PI Klein BK, Mckearn JP, Olins PO, Paik K, Thomas JW;
 XX
 DR WPI; 2003-678181/64.
 XX
 PT Ex vivo expansion of stem cells (e.g. hematopoietic cells) for gene
 PT therapy, e.g. using expanded stem cells for treating thrombocytopenia, by
 PT culturing the cells in a growth medium containing a variant or mutant of
 PT human interleukin-3.
 XX
 PS Disclosure; SEQ ID NO 168; 242pp; English.

XX
 CC The invention describes ex vivo expansion of stem cells comprising
 CC culturing the stem cells with a growth medium containing a human
 CC interleukin-3 (hIL-3) mutant polypeptide. The hIL-3 mutant polypeptide
 CC has a 133, 111, 133 or 111 amino acid sequence (designated hIL-3a, hIL-
 CC 3b, hIL-3c and hIL-3d, respectively), given in the specification. The
 CC method is useful for ex vivo expansion of stem cells for gene therapy.
 CC The expanded stem cells are useful for treating patients with a
 CC haematopoietic disorder e.g. aplastic anaemia, Chediak-Higashi syndrome,
 CC systemic lupus erythematosus, leukaemia, myelodysplastic syndrome,
 CC myelofibrosis, neutropenia or thrombocytopenia. The method is
 CC particularly useful for ex vivo expansion of haematopoietic cells for use
 CC in: (a) restoring haematopoietic cells to normal amounts in those cases
 CC where the number of cells has been reduced due to diseases or to
 CC therapeutic treatments (e.g. radiation or chemotherapy); (b) preventing
 CC or treating bone marrow suppression or haematopoietic deficiencies, which
 CC occur in patients treated with e.g. azidothymidine (AZT), alkylating
 CC agents or chloramphenicol; or (c) treating rheumatoid arthritis or other
 CC immune disorders resulting from viral, microbial or parasitic infection.
 CC This sequence represents an ex vivo stem cell expansion method associated
 CC polynucleotide.
 XX
 SQ Sequence 16 BP; 5 A; 3 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 14.5%; Score 11.2; DB 1; Length 16;
 Best Local Similarity 81.2%; Pred. No. 1.5e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX
 QY 2 CCTAACCACTGGTTCA 17
 Db 16 CCTGACATATGGTTCA 1
 RESULT 155
 ADC02003/c
 ID ADC02003 standard; DNA; 16 BP.
 XX
 AC ADC02003;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Ex vivo stem cell expansion related polynucleotide #18.
 XX
 KW antianaemic; immunomodulator; dermatological; antiinflammatory;
 KW immunosuppressive; cytostatic; haemostatic; antirheumatic; antiarthritic;
 KW osteopathic; gene therapy; cell therapy; ex vivo expansion; stem cell;
 KW human interleukin-3 mutant; hIL-3 mutant; haematopoietic disorder;
 KW aplastic anaemia; Chediak-Higashi syndrome; systemic lupus erythematosus;
 KW leukaemia; myelodysplastic syndrome; myelofibrosis; neutropenia;
 KW thrombocytopenia; radiation; chemotherapy; bone marrow suppression;
 KW haematopoietic deficiency; azidothymidine; AZT; alkylating agent;
 KW chloramphenicol; rheumatoid arthritis; immune disorder; infection; ds.
 XX
 OS Synthetic.
 XX
 PN US2003103936-A1.
 XX
 PD 05-JUN-2003.
 XX
 PF 04-MAR-2002; 2002US-00090182.
 XX
 PR 24-NOV-1992; 92US-00981044.
 PR 22-NOV-1993; 93WO-US011197.
 PR 06-APR-1995; 95US-00411795.
 PR 09-DEC-1996; 96US-00764114.
 XX
 PA (BAUE/) BAUER S C.
 PA (ABRA/) ABRAMS M A.
 PA (BRAE/) BRAFORD-GOLDBERG S R.
 PA (CAPA/) CAPARON M H.
 PA (EAST/) EASTON A M.
 PA (KLEI/) KLEIN B K.
 PA (MCKE/) MCKEARN J P.


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PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 330165; 29pp + Sequence Listing; German.
PS
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 12 BP; 2 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 62 TAACCAACGCT 72
DB 1 TAACCAACGCT 11
XX
RESULT 158
ABI02556/c
ID ABI02556 standard; DNA; 12 BP.
XX
XX AC ABI02556;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 302529 for detecting SNP TSC0020049.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 302529; 29pp + Sequence Listing; German.
PS
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 12 BP; 2 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 62 TAACCAACGCT 72
DB 1 TAACCAACGCT 11
XX
RESULT 159
ABI26471
ID ABI26471 standard; DNA; 12 BP.
XX
XX AC ABI26471;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 326444 for detecting SNP TSC0033078.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 326444; 29pp + Sequence Listing; German.
PS
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 12 BP; 2 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 62 TAACCAACGCT 72
DB 12 TAACCAACGCT 2
XX

```


CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 14.3%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 CCTTAACCAAA 69

Db 1 CCTTAACCAAA 11

RESULT 160

ABI09738/c
 ID ABI09738 standard; DNA; 12 BP.

XX AC ABI09738;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 309711 for detecting SNP TSC0023629.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX PS WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 309711; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 3 A; 1 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 14.3%; Score 11; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAACG 71

XXXXXXXXXXXX

Db 11 TTAACCAACG 1

RESULT 161

ABI19204/c
 ID ABI19204 standard; DNA; 12 BP.

XX AC ABI19204;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 319177 for detecting SNP TSC0029109.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX PS WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 319177; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

XX Query Match 14.3%; Score 11; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTTAACCACT 11

XXXXXXXXXXXX
 Db 12 ACCTTAACCACT 2

RESULT 162

ABI64792/c
 ID ABI64792 standard; DNA; 12 BP.

XX AC ABI64792;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 364765 for detecting SNP TSC0054705.

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 364765; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 2 A; 3 C; 3 G; 6 T; 0 U; 0 Other;
 SQ Query Match 14.3%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 61 TTAACCAACG 71
 Db 11 TTAACCAACG 1
 RESULT 163
 ABH84855
 ID ABH84855 standard; DNA; 12 BP.
 XX AC ABH84855;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 284848 for detecting SNP TSC0012028.
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 284848; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 5 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
 SQ Query Match 14.3%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 61 TTAACCAACG 71
 Db 2 TTAACCAACG 12
 RESULT 164
 ABH17153
 ID ABH17153 standard; DNA; 13 BP.
 XX AC ABH17153;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 217130 for detecting SNP TSC0052778.
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 217130; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 CCTTAACCAA 69
 Db 1 CCTTAACCAA 11
 |||||

RESULT 165
 ABH51662/c
 ID ABH51662 standard; DNA; 13 BP.
 XX
 AC ABH51662;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 251639 for detecting SNP TSC0061400.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 251639; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 CCTTAACCAA 68
 Db 11 CCTTAACCAA 1
 |||||

RESULT 166
 ABC39244/c
 ID ABC39244 standard; DNA; 13 BP.
 XX
 AC ABC39244;
 XX
 DT 20-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 39261 for detecting SNP TSC0012030.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 39261; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 2 A; 1 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAACG 71
 Db 13 TTAACCAACG 3
 |||||

RESULT 167
 ABC39245

```

ID ABC39245 standard; DNA; 13 BP.
XX AC ABC39245;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39262 for detecting SNP TSC0012030.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39263; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAACG 71
Db 1 TTAACCAAAACG 11
|||||
RESULT 168
ABC39246/c
ID ABC39246 standard; DNA; 13 BP.
XX AC ABC39246;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39263 for detecting SNP TSC0012030.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI C'ek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39262; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAACG 71
Db 1 TTAACCAAAACG 11
|||||
RESULT 168
ABC39246/c
ID ABC39246 standard; DNA; 13 BP.
XX AC ABC39246;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39263 for detecting SNP TSC0012030.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI C'ek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39263; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAACG 71
Db 13 TTAACCAAAACG 3
|||||
RESULT 169
ABF60143
ID ABF60143 standard; DNA; 13 BP.
XX AC ABF60143;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 160140 for detecting SNP TSC0040323.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI C'ek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39263; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 14.3%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAACG 71
Db 13 TTAACCAAAACG 3
|||||

```

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DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 160140; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.3%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 60 CTTAACCAAC 70
DB 1 CTTAACCAAC 11
RESULT 170
ID ABC29924 standard; DNA; 13 BP.
XX
AC ABC29924;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 29941 for detecting SNP TSC0009018.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 29941; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.3%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 60 CTTAACCAAC 70
DB 1 CTTAACCAAC 11
RESULT 170
ID ABC29924 standard; DNA; 13 BP.
XX
AC ABC29924;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 29941 for detecting SNP TSC0009018.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 29941; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.3%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 CCTTAACCAA 69
DB 13 CCTTAACCAA 3
RESULT 171
ID ABF31679 standard; DNA; 13 BP.
XX
AC ABF31679;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 131676 for detecting SNP TSC0032863.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 131676; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 5 C; 0 G; 2 T; 0 U; 1 Other;
Query Match 14.3%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
    Query Match      14.3%; Score 11; DB 1; Length 13;
    Best Local Similarity 100.0%; Pred. No. 1.2e+02;
    Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 64 ACCAAACGTTA 74
Db 13 ACCAAACGTTA 3
|||||

RESULT 177
ABC29925
ID ABC29925 standard; DNA; 13 BP.
XX
AC ABC29925;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 29942 for detecting SNP TSC0009018.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 29942; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
    Query Match      14.3%; Score 11; DB 1; Length 13;
    Best Local Similarity 100.0%; Pred. No. 1.2e+02;
    Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 CCTTAACCAA 69
Db 1 CCTTAACCAA 11
|||||

RESULT 178
ABH44355
ID ABH44355 standard; DNA; 13 BP.
XX
AC ABH44355;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 244332 for detecting SNP TSC0059632.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 244332; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
    Query Match      14.3%; Score 11; DB 1; Length 13;
    Best Local Similarity 100.0%; Pred. No. 1.2e+02;
    Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 64 ACCAAACGTTA 74
Db 1 ACCAAACGTTA 11
|||||

RESULT 179
ABF60142/c
ID ABF60142 standard; DNA; 13 BP.
XX
AC ABF60142;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 160139 for detecting SNP TSC0040323.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```


KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 160139; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 60 CTTAACCAAC 70
 DB 13 CTTAACCAAC 3
 RESULT 180
 ABH49076/C
 ID ABH49076 standard; DNA; 13 BP.
 XX
 AC ABH49076;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 249053 for detecting SNP TSC0060842.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 249053; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 60 CTTAACCAAC 70
 DB 13 CTTAACCAAC 3
 RESULT 180
 ABH49076/C
 ID ABH49076 standard; DNA; 13 BP.
 XX
 AC ABH49076;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 249053 for detecting SNP TSC0060842.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 249053; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 60 CTTAACCAAC 70
 DB 13 CTTAACCAAC 3
 RESULT 181
 ABH49077
 ID ABH49077 standard; DNA; 13 BP.
 XX
 AC ABH49077;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 249054 for detecting SNP TSC0060842.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 249054; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 CTTAACCAAC 70

Db 1 CTTAACCAAC 11

RESULT 182

AAT17240
 ID AAT17240 standard; DNA; 15 BP.

XX AC AAT17240;

XX DT 30-MAY-1996 (first entry)

XX DE Epimorphin upstream primer.

XX KW Epimorphin; human; mouse; wound; burn; epithelial tissue; diagnosis;
 KW treatment; morphogenetic abnormality; cosmetic; hair growth stimulator;
 KW PCR; amplification; ss.

XX OS Synthetic.

XX PN EP698666-A2.

XX PD 28-FEB-1996.

XX PF 20-JUN-1995; 95EP-00304270.

XX PR 21-JUN-1994; 94JP-00162874.

XX PR 31-MAR-1995; 95JP-00099979.

XX PR 31-MAR-1995; 95JP-00099980.

XX PA (SUME) SUMITOMO ELECTRIC IND CO.

XX PI Hirai Y, Koshida S, Oka Y;

XX DR WPI; 1996-118213/13.

XX PT Novel polypeptide containing an epimorphin functional domain - has
 PT possible benefits in epithelial tissue treatments, e.g. burns and for
 PT artificial organs.

XX PS Example 7; Page 13; 62pp; English.

XX CC The primers given in AAT17240 and AAT17241 are used in RT-PCR for the
 CC amplification of epimorphin cDNA

XX SQ Sequence 15 BP; 2 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 CGGACCGGCT 48

Db 4 CGGACCGGCT 14

RESULT 183

AAT62415
 ID AAT62415 standard; cDNA; 15 BP.

XX AC AAT62415;

XX DT 02-JUL-1997 (first entry)

XX DE Epimorphin coding sequence 5' primer.

XX KW Human; mouse; epimorphin; coiled-coil region; functional domain; tissue;
 KW hydrophobic; deletion; truncation; regulation; morphogenesis; epithelium;
 KW artificial organ; cosmetic; hair tonic; primer; PCR; amplification;
 KW polymerase chain reaction; ss.

XX OS Synthetic.

XX PN JP09065885-A.

XX PD 11-MAR-1997.

XX PF 29-MAR-1996; 96JP-00099684.

XX PR 31-MAR-1995; 95JP-00099980.

XX PR 19-JUN-1995; 95JP-00175540.

XX PA (SUME) SUMITOMO ELECTRIC IND CO.

XX DR WPI; 1997-220419/20.

XX PT Modified epimorphin and related DNA - useful e.g. for treatment of
 PT tissues or in artificial organs, or as an ingredient in cosmetics.

XX PS Example 1; Page 7; 18pp; Japanese.

XX CC The invention relates to novel human (AAW14257-9) or mouse (AAW14260-2)
 CC epimorphin proteins with replacements, deletions or substitutions in the
 CC amino acid sequence. The new epimorphin protein consists of: (a) an N-
 CC terminal coiled-coil region; (b) a functional domain in the middle; and
 CC (c) a C-terminal coiled-coil region. A hydrophobic region in the C-
 CC terminal has been deleted and at least some amino acids have been deleted
 CC from the terminals of coiled coil regions (a) and/or (c). The primers
 CC AAT62415-6 were used to amplify the coding sequences for the human
 CC (AAT62410) and mouse (AAT62414) epimorphin proteins, which were
 CC subsequently used to generate the truncated proteins above. Epimorphin is
 CC a protein which regulates morphogenesis of epithelial tissues. It can be
 CC used for treatment of tissues or used directly in artificial organs or as
 CC an ingredient in cosmetics, hair tonic, etc

XX SQ Sequence 15 BP; 2 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 CGGACCGGCT 48

Db 4 CGGACCGGCT 14

RESULT 184

AAT62722
 ID AAT62722 standard; RNA; 15 BP.

XX AC AAT62722;

XX DT 28-MAR-2000 (first entry)

XX DE Substrate for HH ribozyme HCV-6111 which cleaves HCV RNA at nt. 6111.

XX KW Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
 KW cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;

KW autoimmune disease; ss.
 XX Hepatitis C virus.
 OS WO9955847-A2.
 PN 04-NOV-1999.
 PD
 XX
 XX 26-APR-1999; 99WO-US009027.
 XX
 XX 27-APR-1998; 98US-0083217P.
 PR 18-SEP-1998; 98US-0100842P.
 PR 25-FEB-1999; 99US-00257608.
 PR 23-MAR-1999; 99US-00274553.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
 PI WPI; 2000-062023/05.
 XX
 XX Novel ribozymes for the treatment of diseases and conditions related to
 DR hepatitis C infection.
 XX
 XX Claim 1; Page 61; 123pp; English.
 XX
 XX The present sequence represents the preferred target sequence of an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the Hepatitis C virus (HCV) RNA sequence at the base position given in
 CC the descriptor line. The HCV sequence was screened for optimal ribozyme
 CC target sites using a computer folding algorithm and regions of the mRNA
 CC which did not form secondary folding structures and contained potential
 CC ribozyme cleavage sites were identified. Ribozymes were synthesised to
 CC target these sites and their activities optimised by either varying the
 CC length of the binding arms or by modification to prevent degradation and/or
 CC nucleases. The ribozymes of the invention inhibit gene expression and
 CC viral replication, and are used to treat diseases associated with
 CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
 CC hepatocellular carcinoma. The ribozymes may be used in combination with
 CC interferon to treat HCV infection, other infectious diseases, autoimmune
 CC diseases, and cancer
 XX
 XX Sequence 15 BP; 0 A; 4 C; 7 G; 0 T; 4 U; 0 Other;
 SQ
 Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 1.5e+02;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 22 GTTCGCTTCGC 32
 DB 1 GUUCGCUUCG 11
 RESULT 185
 AAZ62720
 ID AAZ62720 standard; RNA; 15 BP.
 XX
 AC AAZ62720;
 XX
 XX 28-MAR-2000 (first entry)
 DT
 XX Substrate for HH ribozyme HCV-6106 which cleaves HCV RNA at nt. 6106.
 DE
 XX Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
 KW cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
 KW autoimmune disease; ss.
 XX Hepatitis C virus.
 OS
 XX WO9955847-A2.
 PN
 XX 04-NOV-1999.
 PD
 XX

PF 26-APR-1999; 99WO-US009027.
 XX
 XX 27-APR-1998; 98US-0083217P.
 PR 18-SEP-1998; 98US-0100842P.
 PR 25-FEB-1999; 99US-00257608.
 PR 23-MAR-1999; 99US-00274553.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
 PI WPI; 2000-062023/05.
 XX
 XX Novel ribozymes for the treatment of diseases and conditions related to
 DR hepatitis C infection.
 XX
 XX Claim 1; Page 61; 123pp; English.
 XX
 XX The present sequence represents the preferred target sequence of an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the Hepatitis C virus (HCV) RNA sequence at the base position given in
 CC the descriptor line. The HCV sequence was screened for optimal ribozyme
 CC target sites using a computer folding algorithm and regions of the mRNA
 CC which did not form secondary folding structures and contained potential
 CC ribozyme cleavage sites were identified. Ribozymes were synthesised to
 CC target these sites and their activities optimised by either varying the
 CC length of the binding arms or by modification to prevent degradation and/or
 CC nucleases. The ribozymes of the invention inhibit gene expression and
 CC viral replication, and are used to treat diseases associated with
 CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
 CC hepatocellular carcinoma. The ribozymes may be used in combination with
 CC interferon to treat HCV infection, other infectious diseases, autoimmune
 CC diseases, and cancer
 XX
 XX Sequence 15 BP; 2 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
 SQ
 Query Match 14.3%; Score 11; DB 1; Length 15;
 Best Local Similarity 63.6%; Pred. No. 1.5e+02;
 Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 21 CGTTCGCTTCG 31
 DB 5 CGUUCGCUUCG 15
 RESULT 186
 ABX00571
 ID ABX00571 standard; RNA; 15 BP.
 XX
 AC ABX00571;
 XX
 XX 23-DEC-2002 (first entry)
 DT
 XX Hepatitis C virus substrate #353 for HCV hammerhead ribozyme #353.
 DE
 XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
 KW type I interferon; interferon alpha; interferon beta; cytosstatic;
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
 KW substrate; hammerhead ribozyme; HH ribozyme; ss.
 XX
 XX Hepatitis C virus.
 OS
 XX US2002082225-A1.
 PN
 XX 27-JUN-2002.
 PD
 XX 23-MAR-1999; 99US-00274553.
 PF
 XX 23-MAR-1999; 99US-00274553.
 PR
 XX (BLAT/) BLATT L.
 PA

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PA (MCSW/) MCSWIGGEN J A.
PA (ROBE/) ROBERTS B.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
XX WPI; 2002-617759/66.
XX
XX WPI; 2002-617759/66.
XX
XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
XX replication and are useful to treat hepatitis C virus infections and
XX cirrhosis, liver failure or hepatocellular carcinoma.
XX
XX Claim 1; Page 31; 80pp; English.
XX
XX The present invention relates to enzymatic nucleic acids which
XX specifically cleave RNA derived from Hepatitis C virus (HCV). The
XX enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
XX (HP) motif where the binding arms comprise sequences complementary to one
XX of the substrate sequences defined in the specification. The HCV
XX ribozymes are useful for modulating the expression and/or replication of
XX HCV. They can be used to treat cirrhosis, liver failure and/or
XX hepatocellular carcinoma. The HCV ribozymes are also useful for treating
XX a condition associated with HCV infection in conjunction with one or more
XX other drug therapies, particularly type I interferon, especially
XX interferon alpha, beta or gamma or consensus interferon. The present
XX sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
XX Some of the sequence data for this patent did not form part of the
XX printed specification. The complete sequence data for this patent was
XX obtained in electronic format directly from the USPTO web site at
XX seqdata.uspto.gov/psipdIDEntry.html
XX
XX Sequence 15 BP; 2 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
SQ
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 1.5e+02;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 21 CGTTCGCTTCG 31
Db 5 CGUUCGCUUCG 15

RESULT 187
ABX00573
ID ABX00573 standard; RNA; 15 BP.
XX
XX ABX00573;
XX
XX 23-DEC-2002 (first entry)
XX
XX Hepatitis C virus substrate #355 for HCV hammerhead ribozyme #355.
DE
XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
XX HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
XX liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
XX type I interferon; interferon alpha; interferon beta; cytostatic;
XX interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
XX substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
XX Hepatitis C virus.
OS
XX
XX US2002082225-A1.
XX
XX 27-JUN-2002.
XX
XX 23-MAR-1999; 99US-00274553.
XX
XX 23-MAR-1999; 99US-00274553.
XX
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX (ROBE/) ROBERTS B.
PA

```

```

PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
XX WPI; 2002-617759/66.
XX
XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
XX replication and are useful to treat hepatitis C virus infections and
XX cirrhosis, liver failure or hepatocellular carcinoma.
XX
XX Claim 1; Page 31; 80pp; English.
XX
XX The present invention relates to enzymatic nucleic acids which
XX specifically cleave RNA derived from Hepatitis C virus (HCV). The
XX enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
XX (HP) motif where the binding arms comprise sequences complementary to one
XX of the substrate sequences defined in the specification. The HCV
XX ribozymes are useful for modulating the expression and/or replication of
XX HCV. They can be used to treat cirrhosis, liver failure and/or
XX hepatocellular carcinoma. The HCV ribozymes are also useful for treating
XX a condition associated with HCV infection in conjunction with one or more
XX other drug therapies, particularly type I interferon, especially
XX interferon alpha, beta or gamma or consensus interferon. The present
XX sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
XX Some of the sequence data for this patent did not form part of the
XX printed specification. The complete sequence data for this patent was
XX obtained in electronic format directly from the USPTO web site at
XX seqdata.uspto.gov/psipdIDEntry.html
XX
XX Sequence 15 BP; 0 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
SQ
Query Match 14.3%; Score 11; DB 1; Length 15;
Best Local Similarity 63.6%; Pred. No. 1.5e+02;
Matches 7; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 22 GTTCGCTTCGC 32
Db 1 GUUCGCUUCGC 11

RESULT 188
AAZ44950/c
ID AAZ44950 standard; DNA; 76 BP.
XX
XX AAZ44950;
XX
XX 16-MAY-2000 (first entry)
XX
XX P. alcaligenes repeat (PAR) element DNA #57.
XX
XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
XX detoxifying enzyme; repeat element; PAR; ss.
OS
XX Pseudomonas alcaligenes.
XX
XX WO9964632-A1.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013295.
XX
XX 12-JUN-1998; 98US-0089086P.
XX
XX 12-JUN-1998; 98US-0089101P.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX
XX Raleigh EA, Vaisvila R, Morgan RD;
XX
XX WPI; 2000-116558/10.
XX
XX Cloning intact genes used to isolate genes for restriction enzymes.
XX

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PS Claim 7a; Page 60; 97pp; English.
XX
CC This invention describes a novel method for cloning intact, diversity-
CC selected genes (I) from within gene cassettes (GC) which comprises
CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
CC to these repeats and amplification to produce DNA fragments containing
CC (I), ligating these fragments into a vector and transforming cells with
CC the vector. This method is used to clone a wide variety of prokaryotic
CC genes that provide a selective advantage under particular conditions,
CC particularly those that encode restriction enzymes (used as reagents in
CC molecular biology); adhesins (for use in coating or for targeting
CC molecules or organisms to particular sites, e.g. for competitive
CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
CC the toxin, or in vaccination, or a modification methyltransferase. Intact
CC genes can be cloned directly with a high probability that the orientation
CC of expression is known in advance and low probability of association with
CC extraneous, possibly toxic, genes. AA244894-244980 represent the
CC pseudomonas alcaligenes repeat (PAR) elements described in the method of
CC the invention
XX
SQ Sequence 76 BP; 16 A; 25 C; 18 G; 17 T; 0 U; 0 Other;
Query Match 14.3%; Score 11; DB 1; Length 76;
Best Local Similarity 49.2%; Pred. No. 1.7e+02;
Matches 29; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
QY 17 AAGTCGTTGCGTTCGCTACTCGGACCGGCTAAAGCCGGCCCTTACCAACGTTAG 75
Db ||| ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
61 AAGGGCGCGCTTCGCGGTCGCTCCGAGTGAGCGAAGCAACGACTTGGAGCCAAATTGTTAG 3
RESULT 189
AAT50334/c
ID AAT50334 standard; RNA; 15 BP.
AC AAT50334;
XX
XX 11-MAR-1997 (first entry)
XX
XX Rabbit CETP HH ribozyme target sequence #1787.
XX
KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
KW LDL; ss.
XX
OS Oryctolagus cuniculus.
XX
XX WO9620279-A1.
XX
XX 04-JUL-1996.
XX
XX 11-DEC-1995; 95WO-US016000.
XX
XX 23-DEC-1994; 94US-00363240.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (WARN ) WARNER LAMBERT CO.
XX
XX Couture L, Stinchcomb D, Mcswiggen J, Biegaier C, Page M;
XX WPI; 1996-321852/32.
XX
XX New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
XX useful for preventing or treating initial development, progression or
XX regression of vascular diseases, esp. familial hypercholesterolaemia.
XX
XX Claim 4; Page 43; 72pp; English.
XX

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CC AAT50138-T50359 represent target sequences for the rabbit cholesterol
CC ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-
CC T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid
CC transfer between plasma lipoproteins. The numbering of the targets refers
CC to the position of the cleavage site in full length CETP. The ribozyme
CC then binds to 5 nucleotides either side of this site. The ribozymes are
CC able to cleave mRNA from the gene encoding CETP, thereby blocking
CC synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse
CC cholesterol transport (RCT) pathway can be inhibited (or eliminated)
CC thereby preventing the reduction in size density of the high density
CC lipoproteins (HDL), prolonging HDL half life, and therefore increasing
CC HDL levels. The ribozymes can be used to treat conditions associated with
CC abnormal levels of CETP, specifically atherosclerosis, familial
CC hypercholesterolaemia, peripheral vascular disease, dyslipidaemia,
CC hyperbetalipoproteinaemia, hypoalphalipoproteinaemia, vascular
CC complications of diabetes, transplant, atherectomy and angioplastic
CC restenosis. By inhibiting CETP, the levels of HDL and low density
CC lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
CC decrease in LDL levels, and a corresponding increase in HDL levels). The
CC HH ribozymes can also be used diagnostically to study genetic drift and
CC mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes
CC target specific regions of the CETP gene, they have low non-specific
CC activity
XX
SQ Sequence 15 BP; 1 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 43 CCGGCTAAAGCCGG 56
Db ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
15 CAGGCTAAGCCAG 2
RESULT 190
AAT50336/c
ID AAT50336 standard; RNA; 15 BP.
XX
XX AAT50336;
XX
XX 11-MAR-1997 (first entry)
XX
XX Rabbit CETP HH ribozyme target sequence #1788.
XX
KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
KW LDL; ss.
XX
OS Oryctolagus cuniculus.
XX
XX WO9620279-A1.
XX
XX 04-JUL-1996.
XX
XX 11-DEC-1995; 95WO-US016000.
XX
XX 23-DEC-1994; 94US-00363240.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (WARN ) WARNER LAMBERT CO.
XX
XX Couture L, Stinchcomb D, Mcswiggen J, Biegaier C, Page M;
XX WPI; 1996-321852/32.
XX
XX New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
XX useful for preventing or treating initial development, progression or
XX regression of vascular diseases, esp. familial hypercholesterolaemia.
XX
XX Claim 4; Page 43; 72pp; English.
XX

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```

XX PS Claim 4; Page 43; 72pp; English.
XX
CC AAT50138-T50359 represent target sequences for the rabbit cholesterol
CC ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-
CC T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid
CC transfer between plasma lipoproteins. The numbering of the targets refers
CC to the position of the cleavage site in full length CETP. The ribozyme
CC then binds to 5 nucleotides either side of this site. The ribozymes are
CC able to cleave mRNA from the gene encoding CETP, thereby blocking
CC synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse
CC cholesterol transport (RCT) pathway can be inhibited (or eliminated)
CC thereby preventing the reduction in size density of the high density
CC lipoproteins (HDL), prolonging HDL half life, and therefore increasing
CC HDL levels. The ribozymes can be used to treat conditions associated with
CC abnormal levels of CETP, specifically atherosclerosis, familial
CC hypercholesterolaemia, peripheral vascular disease, dyslipidaemia,
CC hyperbetalipoproteinaemia, hypopthalipoproteinaemia, vascular
CC complications of diabetes, transplant, atherectomy and angioplastic
CC restenosis. By inhibiting CETP, the levels of HDL and low density
CC lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
CC decrease in LDL levels, and a corresponding increase in HDL levels). The
CC HH ribozymes can also be used diagnostically to study genetic drift and
CC mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes
CC target specific regions of the CETP gene, they have low non-specific
CC activity
XX SQ Sequence 15 BP; 1 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. NO. 1.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 43 CCGGCTAAAGCCGG 56
Db 14 CAGGCTAAAGCCAG 1

RESULT 191
AAZ62808/c
ID AAZ62808 standard; RNA; 15 BP.
XX AC AAZ62808;
XX
DT 28-MAR-2000 (first entry)
XX
DE Substrate for HH ribozyme HCV-7906 which cleaves HCV RNA at nt. 7906.
XX
KW Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW autoimmune disease; ss.
XX
OS Hepatitis C virus.
XX
PN WO9955847-A2.
XX
PD 04-NOV-1999.
XX
PF 26-APR-1999; 99WO-US009027.
XX
PR 27-APR-1998; 98US-0083217P.
PR 18-SEP-1998; 98US-0100842P.
PR 25-FEB-1999; 99US-00257608.
PR 23-MAR-1999; 99US-00274553.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
XX WPI; 2000-062023/05.
XX
PT Novel ribozymes for the treatment of diseases and conditions related to
PT hepatitis C infection.

```

```

XX PS Claim 1; Page 64; 123pp; English.
XX
CC The present sequence represents the preferred target sequence of an
CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC the Hepatitis C virus (HCV) RNA sequence at the base position given in
CC the descriptor line. The HCV sequence was screened for optimal ribozyme
CC target sites using a computer folding algorithm and regions of the mRNA
CC which did not form secondary folding structures and contained potential
CC ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC target these sites and their activities optimised by either varying the
CC length of the binding arms or by modification to prevent degradation by
CC nucleases. The ribozymes of the invention inhibit gene expression and/or
CC viral replication, and are used to treat diseases associated with
CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC hepatocellular carcinoma. The ribozymes may be used in combination with
CC interferon to treat HCV infection, other infectious diseases, autoimmune
CC diseases, and cancer
XX SQ Sequence 15 BP; 2 A; 2 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 14.0%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. NO. 1.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCAAA 69
Db 14 GCCCATAGCCAAA 1

RESULT 192
AAF87726/c
ID AAF87726 standard; DNA; 15 BP.
XX AC AAF87726;
XX
DT 09-JUL-2001 (first entry)
XX
DE PNA-DNA chimeric oligonucleotide PNA11-DNA4 SEQ ID NO:10.
XX
KW PNA-DNA chimera; peptide nucleic acid; template dependent ligation;
KW probe; hybridisation; single nucleotide polymorphism detection;
KW fluorescent dye; ss.
XX
OS Bacteria.
XX
FH Key Location/Qualifiers
FT misc_feature 1..11
FT /tag= a
FT /note= "PNA monomer region; the PNA moiety of the PNA-DNA
FT chimera is preferably a 2-aminoethylglycine peptide
FT nucleic acid"
XX
PN WO200127326-A2.
XX
PD 19-APR-2001.
XX
PF 06-OCT-2000; 2000WO-US027730.
XX
PR 08-OCT-1999; 99US-00416003.
XX
PA (PEPE-) PE CORP.
XX
PI Egholm M, Chen C;
XX
DR WPI; 2001-290732/30.
XX
PT Production of template-dependent ligation product, useful for detection
PT of specific DNA sequences, comprises enzymatically ligating PNA-DNA
PT chimeric probe to second probe in presence of template nucleic acid and
PT ligase.
XX
PT Example 2; Page 26; 66pp; English.

```

XX The present invention describes a method of producing a template-
 CC dependent ligation product, useful for the detection of specific DNA
 CC sequences. The method comprises enzymatically ligating a PNA-DNA chimeric
 CC probe to a second probe in the presence of a template nucleic acid and a
 CC ligase. The DNA moiety has at least two nucleotides and a 3'-hydroxyl or
 CC 5'-hydroxyl terminus. The chimeric probe and the second probe are
 CC hybridised to the template nucleic acid and are adjacent to each other.
 CC Also described are: (1) a kit for template-dependent ligation comprising
 CC generating a ligation product by enzymatically ligating a PNA-DNA
 CC chimeric probe to a second probe in the presence of a template; and (2) a
 CC duplex hybrid comprising a PNA-DNA chimeric probe, a second probe which
 CC is a PNA-DNA chimera or an oligonucleotide and a template nucleic acid.
 CC Oligonucleotide ligation assays are useful for detecting the presence of
 CC specific sequences in a target DNA sample. The optimised probes and
 CC methods of annealing and ligation improve the precision and accuracy of
 CC assays and tests. The present sequence represents a PNA-DNA chimeric
 CC oligonucleotide which is used in an example from the present invention
 XX

XX Sequence 15 BP; 2 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 1.6e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 48 TAAAGCCGGCCCT 61
 |||||
 Db 15 TAAAGCCGGACCT 2

RESULT 193

AAAF29198/c
 ID AAF29198 standard; DNA; 15 BP.

AC AAF29198;

DT 10-APR-2001 (first entry)

XX Oligonucleotide SEQ ID 13 which binds a TADG5 derived peptide.

XX TADG5; human; zinc finger; SH3 domain; cell signalling; ss;
 KW cell cycle control.

XX Synthetic.

XX WO200102432-A1.

XX 11-JAN-2001.

XX 30-JUN-2000; 2000WO-US018304.

XX 01-JUL-1999; 99US-00346510.

XX (UYAR-) UNIV ARKANSAS.

XX O'Brien TJ, Wang Y;

XX WPI; 2001-123102/13.

XX Novel SH3 domain-containing TADG5 protein useful for regulating gene
 PT replication, as a nutrition supplement, and as a marker for human tissue,
 PT or in cell cycle control.

XX Claim 23; Fig 11; 85pp; English.

XX This invention relates to an SH3 domain-containing protein termed TADG5,
 CC and its variants. The invention includes amino acid and polynucleotide
 CC sequences for TADG5, and oligonucleotides which bind to either the basic
 CC amino acid region and/or the zinc finger motif of the TADG5 protein. The
 CC basic amino acid region or zinc finger motif of TADG5 is useful for
 CC regulating the expression of the TADG5 gene in a cell. The TADG5 protein
 CC is useful as a source of amino acids, as a nutrition supplement, and as a
 CC marker for human tissue, or in cell cycle control. TADG5 protein or

CC peptides generated from the protein sequence are useful as antigens for
 CC the production of polyclonal and monoclonal antibodies. DNA encoding
 CC TADG5 is useful as an antisense vehicle for cell cycle control by
 CC shutting down signalling or cell division. The present sequence
 CC represents an oligonucleotide to which a TADG5 derived peptide binds
 XX

XX Sequence 15 BP; 4 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 1.6e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 55 GGCCCTTAACCAA 68
 |||||
 Db 15 GTGCGCTTAACCAA 2

RESULT 194

AAC68561/c
 ID AAC68561 standard; DNA; 15 BP.

XX AAC68561;

XX 20-FEB-2001 (first entry)

XX Clone 20 DNA sequence which binds to human TADG5 protein.

XX Human; TADG5; antisense inhibition; cell cycle control; ds.

XX Unidentified.

XX US6140074-A.

XX 31-OCT-2000.

XX 09-JUN-1997; 97US-00871732.

XX 09-JUN-1997; 97US-00871732.

XX (OBRI/) O'BRIEN T J.

XX (WANG/) WANG Y.

XX O'Brien TJ, Wang Y;

XX WPI; 2001-040300/05.

XX New TADG5 gene and proteins comprising an SH3 domain useful in cell cycle
 PT control, amino acid source, nutrition supplement, marker of human tissues
 PT and in producing antibodies.

XX Example 1; Fig 11; 26pp; English.

XX The present sequence binds to human TADG5 protein. The gene encoding
 CC TADG5 is used as an antisense vehicle for cell cycle control by shutting
 CC down signalling or cell division. The protein is useful as a source of
 CC amino acids, as a nutrition supplement, as a marker for human tissue, and
 CC in cell cycle control. The proteins may also be used as antigens for the
 CC production of polyclonal and monoclonal antibodies
 XX

XX Sequence 15 BP; 4 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 1.6e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 55 GGCCCTTAACCAA 68
 |||||
 Db 15 GTGCGCTTAACCAA 2

RESULT 195

AAF75701/c
 ID AAF75701 standard; DNA; 15 BP.

KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 XX WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU0000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX Example 7; Page 45; 201pp; English.
 XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX Sequence 15 BP; 1 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 1.6e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 25 CGCTTGGCTCACTC 38
 Db 1 CGCTGGCTGACTC 14
 RESULT 198
 ABX00659/C
 ID ABX00659 standard; RNA; 15 BP.
 XX AC
 XX ABX00659;
 XX 23-DEC-2002 (first entry)
 DE Hepatitis C virus substrate #441 for HCV hammerhead ribozyme #441.
 KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
 KW type I interferon; interferon alpha; interferon beta; cytostatic;
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
 KW substrate; hammerhead ribozyme; HH ribozyme; ss.
 XX Hepatitis C virus.
 OS US2002082225-A1.
 XX PN

XX 27-JUN-2002.
 XX PD 23-MAR-1999; 99US-00274553.
 XX PF 23-MAR-1999; 99US-00274553.
 XX PR (BLAT/) BLATT L.
 XX PA (MCSW/) MCSWIGGEN J A.
 XX PA (ROBE/) ROBERTS B.
 XX PA (PAVC/) PAVCO P A.
 XX PA (MACE/) MACEJACK D.
 XX PI Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
 XX WPI; 2002-617759/66.
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
 PT replication and are useful to treat hepatitis C virus infections and
 PT cirrhosis, liver failure or hepatocellular carcinoma.
 XX Claim 1; Page 33; 80pp; English.
 XX The present invention relates to enzymatic nucleic acids which
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
 CC (HP) motif where the binding arms comprise sequences complementary to one
 CC of the substrate sequences defined in the specification. The HCV
 CC ribozymes are useful for modulating the expression and/or replication of
 CC HCV. They can be used to treat cirrhosis, liver failure and/or
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
 CC a condition associated with HCV infection in conjunction with one or more
 CC other drug therapies, particularly type I interferon, especially
 CC interferon alpha, beta or gamma or consensus interferon. The present
 CC sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
 CC Some of the sequence data for this patent did not form part of the
 CC printed specification. The complete sequence data for this patent was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipdIDentry.html
 XX Sequence 15 BP; 2 A; 2 C; 6 G; 0 T; 5 U; 0 Other;
 SQ Query Match 14.0%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 1.6e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 56 GCCCTTTAACCAAA 69
 Db 14 GCCCATAGCCAAA 1
 RESULT 199
 ADL61688/c
 ID ADL61688 standard; DNA; 15 BP.
 XX AC
 XX ADL61688;
 XX 20-MAY-2004 (first entry)
 DE Human p14 methylated PCR primer p14_305m.
 KW detection; methylated cytosine; non-methylated cytosine; CpG-rich region;
 KW BRCA-1; E-cadherin; erb-b2; MDR-1; probe; biochip;
 KW tumour-associated gene; tumour-repressor gene; cancer;
 KW methylation pattern; PCR; primer; ss; p14.
 XX Homo sapiens.
 OS Synthetic.
 XX DE10215770-A1.
 XX PN 30-OCT-2003.
 XX PD
 XX

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PF 10-APR-2002; 2002DE-01015770.
XX
PR 10-APR-2002; 2002DE-01015770.
XX
XX (GIESING) GIESING M.
XX
XX Giesing M, Prix L, Schuetz A;
XX
XX WPI; 2003-835030/78.
XX
XX Detecting methylated and non-methylated cytosines, useful for assessing
XX methylation status of cancer-associated gene promoters, by specific
XX amplification and hybridization.
XX
XX Example; SEQ ID NO 33; 22pp; German.
XX
XX This invention describes a novel method for detecting methylated and/or
XX non-methylated cytosine (C) in at least one nucleic acid. The method
XX comprises (a) treating nucleic acid so that non-methylated C is modified;
XX (b) subjecting the treated nucleic acid to a methylation-specific
XX amplification; and (c) determining, by hybridisation, whether the nucleic
XX acid from (b) has at least one non-modified and/or modified C-containing
XX sequence. The invention also described an analysis kit containing at
XX least one each of methylation-specific primer and methylation-specific
XX probe, optionally also other standard reagents for performing the new
XX methods. The nucleic acid is DNA and has been recovered from biological
XX samples (e.g. blood, urine, mucosal smears etc.) and processed by
XX standard methods. The method is used to detect (non-)methylated C in the
XX regulatory regions of DNA, particularly CpG-rich regions at the
XX transcriptional start site, e.g. in the BRCA-1, E-cadherin, erb-b2 or MDR
XX -1 genes, or other genes (about 20 specified), particularly in at least
XX two different nucleic acid. Non-methylated C is modified so that it has
XX base-pairing behaviour different from that of C, specifically it is
XX treated first with bisulfite and then with alkali, converting it to
XX uracil. Particularly nucleic acid in the primer extension region includes
XX at least 2 CpG motifs, and in the primer pair used, one primer has a 5'-
XX phosphate group while the other is labelled with a fluorescent or
XX chemiluminescent marker. Amplification is by multiplex PCR and the
XX amplicon tested with at least one additional probe, at least partly
XX complementary to a region containing a modified C. The probes are
XX immobilised on an array as part of a biochip, especially formed as a
XX dipstick that also includes a closure and a support stem with the biochip
XX attached to its base. The dipstick is designed for insertion in a
XX reaction vessel. The method is especially used to assess methylation
XX status in the promoter region of tumour-associated, especially tumour-
XX repressor, genes, particularly to identify patients at risk of developing
XX cancer. The method indicates the methylation pattern of a specific
XX sequence, including in samples with a relatively large excess of non-
XX methylated nucleic acid, so can detect partially methylated sequences.
XX Several genes can be analysed simultaneously.
XX
XX Sequence 15 BP; 2 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.0%; Score 10.8; DB 1; Length 15;
XX Best Local Similarity 85.7%; Pred. No. 1.6e+02;
XX Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 30 CGCTCACTCGGGAC 43
XX Db 14 CCCTCACTCGGGAC 1
XX
XX RESULT 200
XX ABEF31054/C
XX ID ABEF31054 standard; DNA; 13 BP.
XX
XX AC ABEF31054;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 131051 for detecting SNP TSC0032709.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

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```

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 131051; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 1 Other;
XX
XX Query Match 13.8%; Score 10.6; DB 1; Length 13;
XX Best Local Similarity 90.9%; Pred. No. 1.4e+02;
XX Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 ACTTAACTACT 11
XX Db 13 RCCTAACTACT 3
XX
XX RESULT 201
XX ABC20880/C
XX ID ABC20880 standard; DNA; 13 BP.
XX
XX AC ABC20880;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 20897 for detecting SNP TSC0004242.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX

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PA (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 20897; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
SQ
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
SQ
XX Query Match 13.8%; Score 10.6; DB 1; Length 13;
XX Best Local Similarity 90.9%; Pred. No. 1.4e+02;
XX Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 ACCTAACCAACT 11
DB 13 RCCTAACCAACT 3
RESULT 202
ABC20881
ID ABC20881 standard; DNA; 13 BP.
XX
AC ABC20881;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 20898 for detecting SNP TSC0004242.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR Oligonucleotide SEQ ID NO 20898 for detecting SNP TSC0004242.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 20898; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
SQ
XX Query Match 13.8%; Score 10.6; DB 1; Length 13;
XX Best Local Similarity 90.9%; Pred. No. 1.4e+02;
XX Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 ACCTAACCAACT 11
DB 13 RCCTAACCAACT 3
RESULT 203
ABF31055
ID ABF31055 standard; DNA; 13 BP.
XX
AC ABF31055;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 131052 for detecting SNP TSC0032709.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 131052; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
SQ

```

Query Match 13.8%; Score 10.6; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ACCTAACCACT 11
 :|||||
 Db 1 RCCTAACCACT 11

RESULT 204
 ABK24190/c
 ID ABK24190 standard; DNA; 15 BP.
 XX
 AC ABK24190;
 XX

DT 09-APR-2002 (first entry)
 DE Retinaldehyde-binding protein 1 allele specific PCR primer #11.
 DE
 KW Human; retinaldehyde-binding protein 1; ss; RLBPI; haplotype; primer;
 KW genotyping; probe; autosomal recessive retinitis pigmentosa; arRP; PCR;
 KW chromosome 15q26; transgenic; ASO; allele specific oligonucleotide.
 XX
 OS Homo sapiens.
 XX
 PN WO200192278-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 29-MAY-2001; 2001WO-US017252.
 XX
 PR 26-MAY-2000; 2000US-0207618P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Choi JY, Kazemi A, Koshy B;
 XX
 DR WPI; 2002-122053/16.
 XX

New genetic variants having polymorphisms in the retinaldehyde-binding protein 1 gene, useful for studying the function of and for expressing RLBPI protein for use in screening drugs for treating diseases related to RLBPI activity.

Claim 16; Page 13; 107pp; English.

The invention relates to an isolated polynucleotide, which comprises genes and haplotypes of the retinaldehyde-binding protein 1 (RLBPI) gene. The polynucleotide comprises polymorphic sites in the RLBPI gene, which are referred to as PSI-24 to designate the order in which they are located in the gene. Also included are methods for haplotyping or genotyping the RLBPI gene of an individual, a method for predicting a haplotype pair for the RLBPI gene of an individual, a method for identifying an association between a trait and at least one haplotype or haplotype pair of the RLBPI gene, a composition comprising at least one genotyping oligonucleotide for detecting a polymorphism in the RLBPI gene at a PS consisting of PSI-PS24, a kit for genotyping the RLBPI gene of an individual comprising a set of oligonucleotides designed to genotype each of PSI-PS24 recombinant non-human organisms transformed or transfected with the isolated polynucleotide, where the organism expresses an RLBPI protein encoded by the first nucleotide sequence or expresses an RLBPI protein encoded by the polymorphic variant sequence, an isolated polypeptide comprising an amino acid sequence that is a polymorphic variant of a reference sequence for the RLBPI protein or its fragment, an anti-RLBPI antibody, a method for screening for drugs targeting the isolated polypeptide, and a computer system for storing and analysing polymorphism data for the RLBPI oncogene gene. The polynucleotide comprising polymorphisms in the RLBPI gene is useful in studying the expression and function of RLBPI, and in expressing RLBPI protein for use in screening candidate drugs to treat diseases related to RLBPI activity (e.g. autosomal recessive retinitis pigmentosa (arRP)). The methods and haplotypes are useful in improving the efficiency and output of several

steps in the drug discovery and development process, including target validation, identifying lead compounds, and early phase clinical trials. These are also useful for designing clinical trials of candidate drugs for treating a specific condition or disease, as well as for screening compounds targeting RLBPI to treat a specific condition or disease predicted to be associated with RLBPI activity. The kit and method are useful for determining whether an individual has one of the haplotypes or haplotype pairs cited above. The transgenic animals are useful for studying expression of the RLBPI isogenes in vivo, for in vivo screening and testing of drugs targeted against RLBPI protein, and for testing the efficacy of therapeutic agents and compounds for retinal diseases in a biological system. The gene for RLBPI is located on chromosome 15q26. The present sequence is an allele specific oligonucleotide (ASO) PCR primer for amplifying a nucleic acid containing a polymorphic RLBPI sequence

Sequence 15 BP; 3 A; 3 C; 8 G; 0 T; 0 U; 1 Other;

Query Match 13.8%; Score 10.6; DB 1; Length 15;
 Best Local Similarity 90.9%; Pred. No. 1.7e+02;
 Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 52 GCCGGCCCTT 62
 |:|||||
 Db 15 GCGGCGCCCTT 5

RESULT 205
 ABV99780
 ID ABV99780 standard; DNA; 15 BP.
 XX
 AC ABV99780;
 XX
 DT 24-FEB-2003 (first entry)
 XX
 DE Human PFKFB2 allele specific oligonucleotide primer #6.
 XX
 KW Human; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2; PFKFB2;
 KW cytosolic; antidiabetic; gene therapy; cancer; diabetes; ss; ASO;
 KW allele specific oligonucleotide; primer; polymorphism.
 XX
 OS Homo sapiens.
 XX
 PN WO200194363-A2.
 XX
 PD 13-DEC-2001.
 XX
 PF 07-JUN-2001; 2001WO-US018458.
 XX
 PR 07-JUN-2000; 2000US-0209935P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Duda A, Kazemi A, Koshy B;
 XX
 DR WPI; 2002-566434/60.
 XX

New 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2 (PFKFB2) gene variants, for improving efficiency and reliability in the development of drugs for treating diseases associated with PFKFB2 activity e.g. cancer.

Claim 16; Page 13; 95pp; English.

The invention relates to a novel human 6-phosphofructo-2-kinase/ fructose -2,6-biphosphatase 2 (PFKFB2) isogene. The PFKFB2 of the invention has cytosolic and antidiabetic activity. The polynucleotides may have a use in gene therapy. The identified candidate agents targeting PFKFB2, are useful for treating cancer and diabetes. The methods of the invention are useful for improving the efficiency and reliability of several steps in the discovery and development of drugs for treating diseases associated with PFKFB2 activity. The present sequence represents a allele specific oligonucleotide (ASO) primer used in the invention to detect PFKFB2 gene polymorphisms

```

SQ Sequence 15 BP; 1 A; 6 C; 7 G; 0 T; 0 U; 1 Other;
  Query Match      13.8%; Score 10.6; DB 1; Length 15;
  Best Local Similarity 90.9%; Pred. No. 1.7e+02;
  Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 38 CGGACCGGCT 48
DB 4 CGGACCGGCK 14

RESULT 206
ACN13607
ID ACN13607 standard; RNA; 17 BP.
XX AC ACN13607;
XX DT 22-APR-2004 (first entry)
XX DE WNV minus strand Zinzyne substrate SEQ ID NO 13610.
XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyne; ss.
XX OS West Nile Virus.
XX PN WO200268637-A2.
XX PD 06-SEP-2002.
XX PF 19-OCT-2001; 2001WO-US048350.
XX PR 20-OCT-2000; 2000US-0242411P.
XX PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
XX New nucleic acid molecule that modulates replication of West Nile Virus
(WNV), useful for treating a condition related to WNV infection e.g.
pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX Claim 23; SEQ ID NO 13610; 495pp; English.
XX The invention relates to nucleic acid molecules that modulate replication
of the West Nile Virus (WNV). The nucleic acid molecules are useful for
treating a condition related to WNV infection e.g. pancreatitis,
encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
molecule is selected from the group of ribozymes consisting of
Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The
nucleic acid molecules further comprise at least five ribose residues, at
least ten 2'-O-methyl modifications, phosphorothioate linkages on at
least three of the 5' terminal nucleotides and a 3' end modification of a
3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
in the specification. The present sequence is that of a nucleic acid
molecule of the invention
XX Sequence 17 BP; 0 A; 8 C; 6 G; 0 T; 3 U; 0 Other;

Query Match      13.8%; Score 10.6; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 2e+02;
Matches 12; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 44 CGGCTAAAGCGGCC 60

SQ Sequence 17 BP; 3 A; 6 C; 8 G; 0 T; 0 U; 0 Other;
  Query Match      13.8%; Score 10.6; DB 1; Length 17;
  Best Local Similarity 76.5%; Pred. No. 2e+02;
  Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 43 CGGCTAAAGCGGCC 59
DB 17 CGGCTCTTGGCGGCC 1

RESULT 208
ACN09482
ID ACN09482 standard; RNA; 17 BP.

```

XX ACN09482;
 XX 22-APR-2004 (first entry)
 XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 9485.
 DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
 XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
 KW encephalitis; myocardiitis; meningitis; infection; hepatitis;
 KW liver failure; cancer; cirrhosis; Hammerhead; inozyme; DNAzyme;
 KW Amberzyme; Zinzyne; ss.
 XX West Nile Virus.
 OS WO200268637-A2.
 XX 06-SEP-2002.
 XX 19-OCT-2001; 2001WO-US048350.
 XX 20-OCT-2000; 2000US-0242411P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (BLAT/) BLATT L.
 XX (MCSW/) MCSWIGGEN J A.
 XX Blatt L, Mcswiggen JA;
 XX WPI; 2002-706994/76.
 XX New nucleic acid molecule that modulates replication of West Nile Virus
 PT (WNV), useful for treating a condition related to WNV infection e.g.
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
 XX Claim 23; SEQ ID NO 9485; 495pp; English.
 XX The invention relates to nucleic acid molecules that modulate replication
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
 CC treating a condition related to WNV infection e.g. pancreatitis,
 CC encephalitis, myocardiitis, meningitis, neurologic infection, hepatitis,
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
 CC molecule is selected from the group of ribozymes consisting of
 CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The
 CC nucleic acid molecules further comprise at least five ribose residues, at
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC least three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 CC molecule of the invention
 XX
 SQ Sequence 17 BP; 0 A; 8 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 13.8%; Score 10.6; DB 1; Length 17;
 Best Local Similarity 70.6%; Pred. No. 2e+02;
 Matches 12; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
 QY 43 CCGGCTAAAGCCGCC 59
 Db 1 CCGGCTAAAGCCGCC 17
 RESULT 209
 ABI21580/c
 ID ABI21580 standard; DNA; 12 BP.
 XX
 AC ABI21580;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 321553 for detecting SNP TSC0030322.
 XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX Claim 1; SEQ ID NO 321553; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI02073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 13.5%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 61 TTAACCAACGCT 72
 Db 12 TTAACCAACAT 1
 RESULT 210
 ABI37357
 ID ABI37357 standard; DNA; 12 BP.
 XX
 AC ABI37357;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide primer SEQ ID NO 337330 for detecting SNP TSC0039822.
 XX
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 PR

XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 337330; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 61 TTAACCAACGT 72
XX Db 1 TTAACCAACTT 12
XX
XX RESULT 211
XX ID ABI24047 standard; DNA; 12 BP.
XX AC ABI24047;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide primer SEQ ID NO 324020 for detecting SNP TSC0031735.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 324020; 29pp + Sequence Listing; German.
XX XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC XX
CC SQ Sequence 12 BP; 0 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
CC
CC Query Match 13.5%; Score 10.4; DB 1; Length 12;
CC Best Local Similarity 91.7%; Pred. No. 1.4e+02;
CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
CC
CC QY 27 CTTGCTCGCTC 38
CC Db 1 CTTGCTCGCTC 12
CC
CC RESULT 212
CC ABH88814
CC ID ABH88814 standard; DNA; 12 BP.
CC XX
CC AC ABH88814;
CC XX
CC DT 22-FEB-2002 (first entry)
CC XX
CC DE Oligonucleotide primer SEQ ID NO 288807 for detecting SNP TSC0013687.
CC KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
CC KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
CC KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CC OS Homo sapiens.
CC XX
CC PN WO200177384-A2.
CC XX
CC PD 18-OCT-2001.
CC XX
CC PF 06-APR-2001; 2001WO-IB000713.
CC XX
CC PR 07-APR-2000; 2000DE-01019173.
CC XX
CC PA (EPIG-) EPIGENOMICS AG.
CC PI Olek A, Piepenbrock C, Berlin K;
CC XX
CC DR WPI; 2001-657177/75.
CC XX
CC PT Set of oligonucleotides, useful for diagnosis and cell typing, is
CC PT designed to detect single-nucleotide polymorphisms and cytosine
CC PT methylation status.
CC XX
CC PS Claim 1; SEQ ID NO 288807; 29pp + Sequence Listing; German.
CC XX
CC CC This invention describes novel oligonucleotide primers or peptide nucleic
CC CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC CC range of diseases including immune system, gastrointestinal, respiratory,
CC CC central nervous system, cardiovascular and metabolic disorders. The
CC CC oligomers are also used for detecting cell type differentiation. ABC00010
CC CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC CC represent the oligomers described in the invention. NOTE: The sequence
CC CC data for this patent did not form part of the printed specification, but
CC CC was obtained in electronic format from WIPO at
CC CC ftp.wipo.int/pub/published_pct_sequences
CC XX

```

SQ Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 57 CCCCTTAACCAA 68
Db 1 CCCCTTAACCAA 12

RESULT 213
ABH76526
ID ABH76526 standard; DNA; 12 BP.
XX
AC ABH76526;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 276519 for detecting SNP TSC0004213.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 276519; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 5 A; 5 C; 1 G; 1 T; 0 U; 0 Other;

Query Match      13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 60 CTTAACCAACG 71
Db 1 CTTAACCAACG 12

RESULT 214
ABH10237
ID ABH10237 standard; DNA; 12 BP.
XX
AC ABH10237;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 310210 for detecting SNP TSC0023863.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 310210; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 1 C; 4 G; 5 T; 0 U; 0 Other;

Query Match      13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 13 GTTCAAGTCGTT 24
Db 1 GTTCAAGTCGTT 12

RESULT 215
ABI24044
ID ABI24044 standard; DNA; 12 BP.
XX
AC ABI24044;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 324017 for detecting SNP TSC0031735.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.

```


XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 324017; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
 XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
 XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 27 CTTGCTCACTC 38
 DB 1 CTTGCTCACTC 12
 |||||
 RESULT 216
 ABH84889
 ID ABH84889 standard; DNA; 12 BP.
 XX AC ABH84889;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 284882 for detecting SNP TSC0012040.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 284882; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
 XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
 XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 63 AACCAACGTTA 74
 DB 1 AACCAACGTTA 12
 |||||
 RESULT 217
 ABH17229
 ID ABH17229 standard; DNA; 12 BP.
 XX AC ABH17229;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 317202 for detecting SNP TSC0027861.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 317202; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 12 BP; 6 A; 4 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 13.5%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 63 AACCAACGTTA 74
 Db 1 AACCAACGTTA 12
 RESULT 218
 ABI23296/c
 ID ABI23296 standard; DNA; 12 BP.
 XX AC
 XX ABI23296;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 323269 for detecting SNP TSC0031302.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 323269 for detecting SNP TSC0031302.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 323269; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 12 BP; 1 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 13.5%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 63 AACCAACGTTA 74
 Db 12 AACCAACGTTA 1
 RESULT 219
 ABI09396
 ID ABI09396 standard; DNA; 12 BP.
 XX AC
 XX ABI09396;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 309369 for detecting SNP TSC0023499.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 DT 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 309369; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.5%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 1.4e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 61 TTAACCAACGTT 72
 Db 1 TTAACCAACGTT 12
 RESULT 220
 ABI39210/c
 ID ABI39210 standard; DNA; 12 BP.
 XX AC
 XX ABI39210;
 XX
 DT 22-FEB-2002 (first entry)

```

XX DE Oligonucleotide primer SEQ ID NO 339183 for detecting SNP TSC0040887.
XX DE
XX DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX DE peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX DE central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX DE
XX OS Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PN
XX PD 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX PF
XX PR 07-APR-2000; 2000DE-01019173.
XX PR
XX PA (EPIG-) EPIGENOMICS AG.
XX PA
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI
XX DR WPI; 2001-657177/75.
XX DR
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 339183; 29pp + Sequence Listing; German.
XX PS
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX CC
XX SQ Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
XX SQ
XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 58 CCCTTAACCTAA 69
DB 12 CCCTTAACCTAA 1

RESULT 221
ABI79324/C
ID ABI79324 standard; DNA; 12 BP.
XX
XX AC ABI79324;
XX AC
XX DT 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide primer SEQ ID NO 339183 for detecting SNP TSC0063196.
XX DE
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX KW
XX OS Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PN
XX PD 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX PF
XX PR 07-APR-2000; 2000DE-01019173.
XX PR
XX PA (EPIG-) EPIGENOMICS AG.
XX PA
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI
XX DR WPI; 2001-657177/75.
XX DR
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 339183; 29pp + Sequence Listing; German.
XX PS
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX CC
XX SQ Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
XX SQ
XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 58 CCCTTAACCTAA 69
DB 12 CCCTTAACCTAA 1

RESULT 222
ABI00892
ID ABI00892 standard; DNA; 12 BP.
XX
XX AC ABI00892;
XX AC
XX DT 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide primer SEQ ID NO 300865 for detecting SNP TSC0019226.
XX DE
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX KW
XX OS Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PN
XX PD 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX PF
XX PR 07-APR-2000; 2000DE-01019173.
XX PR
XX PA (EPIG-) EPIGENOMICS AG.
XX PA
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI
XX DR WPI; 2001-657177/75.
XX DR
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.
XX XX

```

XX PS Claim 1; SEQ ID NO 30865; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 6 A; 2 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 62 TAACCAACGTT 73

Db 1 TAAACAAACGTT 12

RESULT 223

ABI65478

ID ABI65478 standard; DNA; 12 BP.

XX AC ABI65478;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 365451 for detecting SNP TSC0055131.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 365451; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published_pct_sequences

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 4 A; 7 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 57 CCCTTAACCAA 68

Db 1 CCCTCAACCAA 12

RESULT 224

ABI09522

ID ABI09522 standard; DNA; 12 BP.

XX AC ABI09522;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 309495 for detecting SNP TSC0023556.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 309495; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 7 A; 3 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 1.4e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 63 AACCAACGTTA 74

Db 1 AACCAACGTTAA 12

```

RESULT 225
ABI24607/C
ID ABI24607 standard; DNA; 12 BP.
XX
XX AC ABI24607;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 324580 for detecting SNP TSC0032119.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 324580; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 12 BP; 2 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 63 AACCAACACGTTA 74
XX ||||| |||||
XX 12 AACCAACACGTTA 1
XX
XX RESULT 226
ABI2668
ID ABI2668 standard; DNA; 12 BP.
XX
XX AC ABI2668;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 362641 for detecting SNP TSC0053345.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 362641; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 63 AACCAACACGTTA 74
XX ||||| |||||
XX 12 AACCAACACGTTA 1
XX
XX RESULT 227
ABF06463
ID ABF06463 standard; DNA; 13 BP.
XX
XX AC ABF06463;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 106460 for detecting SNP TSC0026684.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.

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KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 362641; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 1.4e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 57 CCCCTTAACCAA 68
XX ||||| |||||
XX 1 CCCCTTAACCAA 12
XX
XX RESULT 227
ABF06463
ID ABF06463 standard; DNA; 13 BP.
XX
XX AC ABF06463;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 106460 for detecting SNP TSC0026684.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.

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XX Oiek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 106460; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAA 69
Db 1 CCCTTAACTAAA 12

RESULT 228
ABC33108/c
ID ABC33108 standard; DNA; 13 BP.
XX
AC ABC33108;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 33125 for detecting SNP TSC0010560.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Oiek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 33125; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 58 CCCTTAACCAAA 69
Db 1 CCCTTAACTAAA 12

RESULT 229
ABC64742/c
ID ABC64742 standard; DNA; 13 BP.
XX
AC ABC64742;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 64759 for detecting SNP TSC0017075.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Oiek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 64759; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 1 C; 3 G; 4 T; 0 U; 0 Other;

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Query Match      13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      61 TTAACCAACGCT 72
Db      12 TTTACCAACGCT 1

RESULT 230
ABF25289
ID ABF25289 standard; DNA; 13 BP.
XX
XX
AC ABF25289;
XX
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 125286 for detecting SNP TSC0031303.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 125286; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 5 C; 3 T; 0 G; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 5 C; 3 T; 0 G; 0 U; 0 Other;
XX
XX Query Match      13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      59 CCTTAACCAAC 70.
Db      1 CCTTAACCATAC 12

RESULT 231
ABF82387
ID ABF82387 standard; DNA; 13 BP.
XX
XX

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AC ABF82387;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 182384 for detecting SNP TSC0045069.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 182384; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 4 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match      13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      24 TCGCTTCGCTCA 35
Db      1 TCGCTTCGTTCA 12

RESULT 232
ABH16937
ID ABH16937 standard; DNA; 13 BP.
XX
XX ABH16937;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 216914 for detecting SNP TSC0052718.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.

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XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 216914; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 57 CCCCTTAACCAA 68
Db 2 CCTCTTAACCAA 13

RESULT 233
ABC90375
ID ABC90375 standard; DNA; 13 BP.
XX AC ABC90375;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 90392 for detecting SNP TSC0022653.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX DE Set of oligonucleotides, useful for diagnosis and cell typing, is
XX DE designed to detect single-nucleotide polymorphisms and cytosine
XX DE methylation status.
XX PS Claim 1; SEQ ID NO 92121; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 57 CCCCTTAACCAA 68
Db 2 CCTCTTAACCAA 13

RESULT 234
ABC92104/c
ID ABC92104 standard; DNA; 13 BP.
XX AC ABC92104;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 92121 for detecting SNP TSC0023041.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX DE Set of oligonucleotides, useful for diagnosis and cell typing, is
XX DE designed to detect single-nucleotide polymorphisms and cytosine
XX DE methylation status.
XX PS Claim 1; SEQ ID NO 92121; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010

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CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 61 TTAACCAACGCT 72

DB 12 TTAACCAACCT 1

RESULT 235

ABF65343

ID ABF65343 standard; DNA; 13 BP.

XX AC

XX ABF65343;

XX DT

XX 22-FEB-2002 (first entry)

XX DE

XX Oligonucleotide SEQ ID NO 165340 for detecting SNP TSC0041467.

XX KW

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS

XX Homo sapiens.

XX PN

XX WO200177384-A2.

XX PD

XX 18-OCT-2001.

XX PF

XX 06-APR-2001; 2001WO-IB000713.

XX PR

XX 07-APR-2000; 2000DE-01019173.

XX PA

XX (EPIG-) EPIGENOMICS AG.

XX PI

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX PT

XX Claim 1; SEQ ID NO 165340; 29pp + Sequence Listing; German.

XX PS

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 7 C; 1 G; 2 T; 0 U; 0 Other;

Query Match

Best Local Similarity 13.5%; Score 10.4; DB 1; Length 13;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY

53 CCGGCCCTTAA 64

DB 1 CCGGCCCTTAA 12

RESULT 236

ABH16936/C

ID ABH16936 standard; DNA; 13 BP.

XX AC

XX ABH16936;

XX DT

XX 22-FEB-2002 (first entry)

XX DE

XX Oligonucleotide SEQ ID NO 216913 for detecting SNP TSC0052718.

XX KW

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS

XX Homo sapiens.

XX PN

XX WO200177384-A2.

XX PD

XX 18-OCT-2001.

XX PF

XX 06-APR-2001; 2001WO-IB000713.

XX PR

XX 07-APR-2000; 2000DE-01019173.

XX PA

XX (EPIG-) EPIGENOMICS AG.

XX PI

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX PS

XX Claim 1; SEQ ID NO 216913; 29pp + Sequence Listing; German.

XX CC

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;

Query Match

Best Local Similarity 13.5%; Score 10.4; DB 1; Length 13;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 57 CCGCCCTTAAACCA 68

DB 12 CCGCCCTTAAACCA 1

RESULT 237

ABC33109

ID ABC33109 standard; DNA; 13 BP.

XX AC

XX ABC33109;

XX DT

XX 20-FEB-2002 (first entry)

XX DE

XX Oligonucleotide SEQ ID NO 33126 for detecting SNP TSC0010560.

```

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 33126; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 58 CCCTTAACCAAA 69
Db 1 CCCTTAACCTAA 12
RESULT 238
ABC63143
ID ABC63143 standard; DNA; 13 BP.
XX
AC ABC63143;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 63160 for detecting SNP TSC0016688.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 90391; 29pp + Sequence Listing; German.

```

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PR C*-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 63160; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 58 CCCTTAACCAAA 69
Db 1 CCCTTAACCAAA 12
RESULT 239
ABC90374/c
ID ABC90374 standard; DNA; 13 BP.
XX
AC ABC90374;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 90391 for detecting SNP TSC0022653.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 90391; 29pp + Sequence Listing; German.

```

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
SQ Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 57 CCCCTTAACCAA 68
Db 12 CCCATTAACCAA 1
||| ||||| |||||

RESULT 240
ABC09254/C
ID ABC09254 standard; DNA; 13 BP.
XX AC ABC09254;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 9245 for detecting SNP TSC0002453.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 9245; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 59 CCTTAACCAAAAC 70
Db 13 CCTTAACCAAAAC 2
||||| |||||

RESULT 241
ABC14136
ID ABC14136 standard; DNA; 13 BP.
XX AC ABC14136;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 14143 for detecting SNP TSC0003223.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 14143; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 0 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
SQ Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 20 TCGTTCGCTTCG 31
Db 1 TCGTTCGCTTCG 12
||||| |||||

RESULT 242

```

ABF52140/c
ID ABF52140 standard; DNA; 13 BP.
XX
AC ABF52140;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 152137 for detecting SNP TSC0038439.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 152137; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 1 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 1 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 61 TTACCAACCGT 72
XX 12 TTAACCAACCGT 1
XX
XX RESULT 243
XX ABF82386/c
XX ID ABF82386 standard; DNA; 13 BP.
XX
XX AC ABF82386;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 182383 for detecting SNP TSC0045069.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX

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OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 182383; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 24 TCGCTTCGCTCA 35
XX 13 TCGCTTCGCTCA 2
XX
XX RESULT 244
XX ABH56999
XX ID ABH56999 standard; DNA; 13 BP.
XX
XX AC ABH56999;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 256976 for detecting SNP TSC0006666.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX

```

XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 256976; 29pp + Sequence Listing; German.
 PS
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 59 CCTTACCAAAAC 70
 DB 2 CCTTATCCAAC 13
 ||||| |||||
 RESULT 245
 ABH58909
 ID ABH58909 standard; DNA; 13 BP.
 XX
 AC ABH58909;
 XX
 XX 22-FEB-2002 (first entry)
 DE
 DE Oligonucleotide SEQ ID NO 258886 for detecting SNP TSC0062914.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPITG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 258886; 29pp + Sequence Listing; German.
 PS
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 59 CCTTACCAAAAC 70
 DB 2 CCTTATCCAAC 13
 ||||| |||||
 RESULT 246
 ABC18089
 ID ABC18089 standard; DNA; 13 BP.
 XX
 AC ABC18089;
 XX
 XX 20-FEB-2002 (first entry)
 DE
 DE Oligonucleotide SEQ ID NO 18096 for detecting SNP TSC0003856.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 18096; 29pp + Sequence Listing; German.
 PS
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 6 A; 2 C; 1 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 61 TTAACCAAAACGT 72
 DB 1 TTAACCTAACGT 12
 ||||| |||||

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 5 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 61 TTAACCAAAACGT 72
 DB 1 TTAACCTAACGT 12
 ||||| |||||


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XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 125285; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 59 CCTTAACCAAC 70
Db 13 CCTTAACCATAC 2

RESULT 250
ABF33591
ID ABF33591 standard; DNA; 13 BP.
XX AC ABF33591;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 133588 for detecting SNP TSC0033315.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 125285; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 59 CCTTAACCAAC 70
Db 13 CCTTAACCATAC 2

RESULT 251
ABC21100
ID ABC21100 standard; DNA; 13 BP.
XX AC ABC21100;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 21117 for detecting SNP TSC0004267.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 21117; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 CAACTGGTTCAC 18
Db 1 CAACTGGTTCAC 12

RESULT 251
ABC21100
ID ABC21100 standard; DNA; 13 BP.
XX AC ABC21100;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 21117 for detecting SNP TSC0004267.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 21117; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

```

CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 0 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 20 TCGTTCGCTTCG 31
Db 1 TCGTTCGCTTCG 12
|||||

RESULT 252

ABCS1266/c
ID ABCS1266 standard; DNA; 13 BP.

XX AC ABCS1266;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 51283 for detecting SNP TSC0014330.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN W0200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 51283; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 61 TTAACCAACGCT 72

Db 13 TTAACCGACGCT 2
|||||

RESULT 253

ABC92105
ID ABC92105 standard; DNA; 13 BP.

XX AC ABC92105;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 92122 for detecting SNP TSC0023041.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN W0200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 92122; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 61 TTAACCAACGCT 72

Db 2 TTAACCAACGCT 13
|||||

RESULT 254

ABF19399/c
ID ABF19399 standard; DNA; 13 BP.

XX AC ABF19399;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 119396 for detecting SNP TSC0029810.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 119396; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 2 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
 CC
 CC Query Match 13.5%; Score 10.4; DB 1; Length 13;
 CC Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 CC
 CC QY 65 CCAACGTTAGG 76
 CC | |||||
 CC 13 CCAACGTTAGG 2
 CC
 CC RESULT 255
 CC ABC69220/c
 ID ABC69220 standard; DNA; 13 BP.
 XX
 AC ABC69220;
 XX
 XX 21-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 69237 for detecting SNP TSC0018011.
 DE
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX

PA (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 69237; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 2 A; 1 C; 3 G; 7 T; 0 U; 0 Other;
 CC
 CC Query Match 13.5%; Score 10.4; DB 1; Length 13;
 CC Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 CC
 CC QY 61 TTAACCAACGCT 72
 CC | |||||
 CC 13 TAAACCAACGCT 2
 CC
 CC RESULT 256
 CC ABC21116/c
 ID ABC21116 standard; DNA; 13 BP.
 XX
 AC ABC21116;
 XX
 XX 20-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 21133 for detecting SNP TSC0004267.
 DE
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 21133; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 3 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 20 TCGTTCGCTTCG 31
 Db 13 TCGTTCGCTTCG 2

RESULT 257
 ABC18088/c
 ID ABC18088 standard; DNA; 13 BP.
 XX AC ABC18088;
 XX DT 20-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 18095 for detecting SNP TSC0003856.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 18095; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 4 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 62 TAACCAACGTT 73
 Db 13 TAACCAACGTT 2

RESULT 258
 ABC21101/c
 ID ABC21101 standard; DNA; 13 BP.
 XX AC ABC21101;
 XX DT 20-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 21118 for detecting SNP TSC0004267.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 21118; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 3 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 20 TCGTTCGCTTCG 31
 Db 13 TCGTTCGCTTCG 2

RESULT 259
 ABC96706/c
 ID ABC96706 standard; DNA; 13 BP.

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XX AC ABC96706;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 96723 for detecting SNP TSC0024023.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PS 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 96723; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 61 TTAACCAACGT 72
XX Db 13 TTAACCAACGT 2
XX RESULT 260
XX ABC14137/c
XX ID ABC14137 standard; DNA; 13 BP.
XX AC ABC14137;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 14144 for detecting SNP TSC0003223.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.

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PN WO200177384-A2.
XX 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 14144; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 4 C; 3 G; 0 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 20 TCGTTCGCTTCG 31
XX Db 13 TCGTTCGCTTCG 2
XX RESULT 261
XX ABC21117
XX ID ABC21117 standard; DNA; 13 BP.
XX AC ABC21117;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 21134 for detecting SNP TSC0004267.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.

```

```
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 21134; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 20 TCGTTCGCTTCG 31
Db 1 TCGCTCGCTTCG 12
XX
RESULT 262
ABC96707
ID ABC96707 standard; DNA; 13 BP.
XX
AC ABC96707;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 96724 for detecting SNP TSC0024023.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 96724; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 20 TCGTTCGCTTCG 31
Db 1 TCGCTCGCTTCG 12
XX
RESULT 263
ABC01742/C
ID ABC01742 standard; DNA; 13 BP.
XX
AC ABC01742;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 1733 for detecting SNP TSC00000635.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 1733; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

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QY 61 TTAACCAACGCT 72
Db 13 TTAACCAACAT 2

RESULT 264
ABF33590/c
ID ABF33590 standard; DNA; 13 BP.
XX
XX AC ABF33590;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 133587 for detecting SNP TSC0033315.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 133587 for detecting SNP TSC0033315.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 133587; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 CAACGTTTCAA 18
Db 13 CAACGTTTCAA 2

RESULT 265
ABF52141
ID ABF52141 standard; DNA; 13 BP.
XX
XX AC ABF52141;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 1734 for detecting SNP TSC00000635.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.

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DE Oligonucleotide SEQ ID NO 152138 for detecting SNP TSC0038439.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX DT 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 152138; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 2 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 61 TTAACCAACGCT 72
Db 2 TTAACCAACGCT 13

RESULT 266
ABFC01743
ID ABFC01743 standard; DNA; 13 BP.
XX
XX AC ABC01743;
XX
XX DT 20-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 1734 for detecting SNP TSC00000635.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.

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XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 1734; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC000010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 61 TTAACCAAACT 72
Db 1 TTAACCAACAT 12
RESULT 267
ABC09255
ID ABC09255 standard; DNA; 13 BP.
XX AC ABC09255;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 9246 for detecting SNP TSC0002453.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 9246; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC000010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 59 CCTTAACCAAAAC 70
Db 1 CCTTAACCAAAAC 12
RESULT 268
ABH58714
ID ABH58714 standard; DNA; 13 BP.
XX AC ABH58714;
XX XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 258691 for detecting SNP TSC0005757.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 258691; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC000010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at

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CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 20 TCGTTCGCTTCG 31
Db 2 TCGTTCGCTTCG 13

RESULT 269
ABC92568/C
ID ABC92568 standard; DNA; 13 BP.
XX
AC ABC92568;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 92585 for detecting SNP TSC0023147.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 92585; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 27 CTTGCTCACTC 38
Db 12 CTTGCTCACTC 1

RESULT 270
ABC47937
ID ABC47937 standard; DNA; 13 BP.
XX
XX ABC47937;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 47954 for detecting SNP TSC0013726.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 47954; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 61 TTACCAACCT 72
Db 2 TTACCAACAT 13

RESULT 271
ABC53521
ID ABC53521 standard; DNA; 13 BP.
XX
XX ABC53521;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 53538 for detecting SNP TSC0014771.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

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XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 53538; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
XX CC
XX CC Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 61 TTAACCAACGCT 72
XX DB 1 TTAACCAACGCT 12
XX
XX RESULT 272
XX ABF06462/C
XX ID ABF06462 standard; DNA; 13 BP.
XX AC ABF06462;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 106459 for detecting SNP TSC0026684.
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 106459; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
XX CC
XX CC Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 61 TTAACCAACGCT 72
XX DB 1 TTAACCAACGCT 12
XX
XX RESULT 273
XX ABC64743
XX ID ABC64743 standard; DNA; 13 BP.
XX AC ABC64743;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 64760 for detecting SNP TSC0017075.
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX Claim 1; SEQ ID NO 64760; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The

```


CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

XX Sequence 13 BP; 4 A; 3 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 61 TTAACCAACGCT 72

Db 2 TTTACCAACGCT 13

RESULT 274

ABF52144/c

ID ABF52144 standard; DNA; 13 BP.

XX

AC ABF52144;

XX

21-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 152141 for detecting SNP TSC0038439.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIC-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

PS Claim 1; SEQ ID NO 152141; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

XX Sequence 13 BP; 3 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 1.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 61 TTAACCAACGCT 72

Db 12 TTAACCAACGCT 1

RESULT 275

ABH58715/c

ID ABH58715 standard; DNA; 13 BP.

XX

AC ABH58715;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 258692 for detecting SNP TSC0005757.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIC-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX

PS Claim 1; SEQ ID NO 258692; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 7 A; 3 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.5%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 1.6e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 20 TCGTTCGTTTCG 31

Db 12 TCGTTCGTTTCG 1

RESULT 276

ABF52145

ID ABF52145 standard; DNA; 13 BP.

XX

AC ABF52145;

```

XX 21-FEB-2002 (first entry)
XX DT
XX DE
XX DE Oligonucleotide SEQ ID NO 152142 for detecting SNP TSC0038439.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PN
XX PD 18-OCT-2001.
XX PF
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS
XX PS Claim 1; SEQ ID NO 63159; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAACGT 72
Db 2 TTAACCAACGT 13
||||| |||||
RESULT 277
ABC63142/C
ID ABC63142 standard; DNA; 13 BP.
XX AC
XX AC ABC63142;
XX DT
XX DT 21-FEB-2002 (first entry)
XX DE
XX DE Oligonucleotide SEQ ID NO 63159 for detecting SNP TSC0016688.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX OS WO200177384-A2.
XX PN
XX PN
XX PD 18-OCT-2001.
XX PF
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS
XX PS Claim 1; SEQ ID NO 152142; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 58 CCCTTAACCAAA 69
Db 13 CCCTTAACCAAA 2
||||| |||||
RESULT 278
ABH06402/C
ID ABH06402 standard; DNA; 13 BP.
XX AC
XX AC ABH06402;
XX DT
XX DT 22-FEB-2002 (first entry)
XX DE
XX DE Oligonucleotide SEQ ID NO 206379 for detecting SNP TSC0050529.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX OS WO200177384-A2.
XX PN
XX PN
XX PD 18-OCT-2001.
XX PF
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is

```

```

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 206379; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 62 TAACCAAAAGCTT 73
Db 12 TAACCAAAAGCTT 1
XX
RESULT 279
ABH06403
ID ABH06403 standard; DNA; 13 BP.
XX
AC ABH06403;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 206380 for detecting SNP TSC0050529.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 206380; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 62 TAACCAAAAGCTT 73
Db 12 TAACCAAAAGCTT 1
XX
RESULT 280
ABH56998/C
ID ABH56998 standard; DNA; 13 BP.
XX
AC ABH56998;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 256975 for detecting SNP TSC00066666.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 256975; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 13.5%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 1.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 59 CCTTAACCAAC 70
Db 11
XX

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Db      12 CCTATCAAAAC 1
RESULT 281
ABF65342/c
ID ABF65342 standard; DNA; 13 BP.
XX
XX AC ABF65342;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 165339 for detecting SNP TSC0041467.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 165339; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 1 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      53 CCGGCCCTTAA 64
Db      13 CCGGCCCTTAA 2

RESULT 282
ABC92569
ID ABC92569 standard; DNA; 13 BP.
XX
XX AC ABC92569;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 92586 for detecting SNP TSC0023147.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27 CTTGCTCACTC 38
Db      2 CTTCACTCACTC 13

RESULT 283
ABC69221
ID ABC69221 standard; DNA; 13 BP.
XX
XX AC ABC69221;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 69238 for detecting SNP TSC0018011.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27 CTTGCTCACTC 38
Db      2 CTTCACTCACTC 13

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XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 69238; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 1 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 61 TTAACCAACGCT 72
XX | |||||
XX 1 TTAACCAACGCT 12
XX
XX RESULT 284
XX ABC53520/C
XX ID ABC53520 standard; DNA; 13 BP.
XX AC ABC53520;
XX XX
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 53537 for detecting SNP TSC0014771.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 53537; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 1 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 61 TTAACCAACGCT 72
XX | |||||
XX 1 TTAACCAACGCT 12
XX
XX RESULT 285
XX ABC40686/C
XX ID ABC40686 standard; DNA; 13 BP.
XX AC ABC40686;
XX XX
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 40703 for detecting SNP TSC0012310.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 40703; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 13.5%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 1.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 61 TTAACCAACGCT 72
XX | |||||
XX 13 TTAACCAACGCT 2
XX
XX Db

```

RESULT 287
ABF19398

XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 258885; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 4 A; 1 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 13.5%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 1.6e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 11; Conservative 0;
 QY 61 TTAACCAACGT 72
 DB 13 TTAACCTACGT 2
 RESULT 289
 AAZ44979/c
 ID AAZ44979 standard; DNA; 31 BP.
 XX
 AC AAZ44979;
 XX 16-MAY-2000 (first entry)
 DE P. alcaligenes repeat (PAR) element DNA #86.
 XX Diversity-selected gene; restriction enzyme; adhesin; toxin;
 KW detoxifying enzyme; repeat element; PAR; ss.
 XX Pseudomonas alcaligenes.
 OS WO9964632-A1.
 XX 16-DEC-1999.
 PD 11-JUN-1999; 99WO-US013295.
 PF 12-JUN-1998; 98US-0089086P.
 XX 12-JUN-1998; 98US-0089101P.
 XX (NEWE) NEW ENGLAND BIOLABS INC.
 PA Raleigh EA, Vaisvila R, Morgan RD;
 XX WPI; 2000-106079/09.
 PT Isolated polynucleotides differentially expressed between metastatic and

DR WPI; 2000-116558/10.
 XX Cloning intact genes used to isolate genes for restriction enzymes.
 XX Claim 10; Page 62; 97pp; English.
 XX This invention describes a novel method for cloning intact, diversity-
 CC selected genes (I) from within gene cassettes (GC) which comprises
 CC identifying DNA repeats that flank GC, hybridizing oligonucleotides (ON)
 CC to these repeats and amplification to produce DNA fragments containing
 CC (I), ligating these fragments into a vector and transforming cells with
 CC the vector. This method is used to clone a wide variety of prokaryotic
 CC genes that provide a selective advantage under particular conditions,
 CC particularly those that encode restriction enzymes (used as reagents in
 CC molecular biology); adhesins (for use in coating or for targeting
 CC molecules or organisms to particular sites, e.g. for competitive
 CC exclusion of a selected pathogen); detoxifying enzymes; toxins that
 CC interact with a host, e.g. for synthesis of inhibitors or antagonists of
 CC the toxin, or in vaccination, or a modification methyltransferase. Intact
 CC genes can be cloned directly with a high probability that the orientation
 CC of expression is known in advance and low probability of association with
 CC extraneous, possibly toxic, genes. AAZ44894-Z44980 represent the
 CC pseudomonas alcaligenes repeat (PAR) elements described in the method of
 CC the invention
 XX SQ Sequence 31 BP; 8 A; 10 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 13.2%; Score 10.2; DB 1; Length 31;
 Best Local Similarity 80.0%; Pred. No. 3.4e+02; Mismatches 3; Indels 0; Gaps 0;
 Matches 12; Conservative 0;
 QY 39 GGGACCGCGCTAAAGC 53
 DB 16 GGGCGCGCTCTAGAGC 2
 RESULT 290
 AAZ84854
 ID AAZ84854 standard; DNA; 10 BP.
 XX
 AC AAZ84854;
 XX 07-APR-2000 (first entry)
 DE Metastatic breast tumour cell downregulated transcript tag #4088.
 XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
 KW non-metastatic breast tumour tissue; gene therapy; anticancer;
 KW antimetastatic; vaccine; diagnosis; ss.
 XX Homo sapiens.
 OS WO9965928-A2.
 XX 23-DEC-1999.
 PD 18-JUN-1999; 99WO-US013647.
 PF 19-JUN-1998; 98US-0089853P.
 XX 19-JUN-1998; 98US-0089977P.
 PR 19-JUN-1998; 98US-0090039P.
 PR 19-JUN-1998; 98US-0090040P.
 PR 19-JUN-1998; 98US-0090041P.
 XX (GENZ) GENZYME CORP.
 PA (ROBE/) ROBERTS B L.
 PA (SHAN/) SHANKARA S.
 XX Roberts BL, Shankara S;
 PI WPI; 2000-106079/09.
 XX Isolated polynucleotides differentially expressed between metastatic and

PT drugs for treating diseases associated with PKFB2 activity e.g. cancer.
 XX Claim 17; Page 13; 95pp; English.
 PS
 XX The invention relates to a novel human 6-phosphofructo-2-kinase/ fructose
 CC -2,6-biphosphatase 2 (PFKFB2) isogene. The PFKFB2 of the invention has
 CC cytosolic and antidiabetic activity. The polynucleotides may have a use
 CC in gene therapy. The identified candidate agents targeting PFKFB2 are
 CC useful for treating cancer and diabetes. The methods of the invention are
 CC useful for improving the efficiency and reliability of several steps in
 CC the discovery and development of drugs for treating diseases associated
 CC with PFKFB2 activity. The present sequence represents a PCR primer used
 CC in the invention to detect PFKFB2 gene polymorphisms by primer extension
 XX
 XX Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 38 CGGACCGGC 47
 Db 1 CGGACCGGC 10
 RESULT 293
 AAV40923
 ID AAV40923 standard; DNA; 11 BP.
 XX
 AC AAV40923;
 XX
 DT 25-SEP-1998 (first entry)
 XX
 DE Primer E2A:1960L11 for abnormality detection.
 XX
 DE PCR primer; chromosomal abnormality; abnormality detection; leukaemia;
 KW lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma;
 KW medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9824928-A2.
 XX
 PD 11-JUN-1998.
 XX
 PF 08-DEC-1997; 97WO-DK000556.
 XX
 PR 06-DEC-1996; 96DK-00001401.
 XX
 PA (PALL/) PALLISGAARD N.
 XX
 PI Pallisgaard N, Hokland P;
 XX
 DR WPI; 1998-333344/29.
 XX
 PT Detection of chromosomal abnormalities - by subjecting patient sample
 PT nucleic acids to a multiplex molecular amplification procedure using
 PT primers specific for characteristic nucleic acid sequence.
 XX
 PS Claim 73; Page 66; 126pp; English.
 XX
 CC This sequence represents a primer used in the method of the invention for
 CC the detection of the presence or absence of chromosomal abnormalities,
 CC each abnormality being associated with a condition in a subject and each
 CC being defined by at least one characteristic nucleic acid sequence. The
 CC method comprises: (a) obtaining a sample of nucleic acids derived from a
 CC subject which may harbour one of the chromosomal abnormalities; (b)
 CC subjecting the sample to a multiplex molecular amplification (MMA)
 CC procedure, where a number of the characteristic sequences, if present in
 CC a sufficient amount, will be amplified; (c) retrieving the product(s)
 CC from step (b), and detecting the presence and/or absence of an amplicon
 CC characteristic of the abnormal sequences to detect the presence or

CC absence of corresponding chromosomal abnormalities; where the MMA
 CC procedure comprises the use of at least 7 mutually distinct primers (MDP)
 CC in one single reaction mixture, each of the primers defining an end of at
 CC least one characteristic nucleic acid sequence, and where at least one of
 CC the primers defines the first end of at least two characteristic nucleic
 CC acid sequences, the characteristic nucleic acid sequences each being
 CC determined in their opposite ends by MDP selected from the remainder of
 CC the MDP. The methods can be used for detecting chromosomal abnormalities
 CC associated with diseases including numerous leukaemia's, lymphoma's,
 CC carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's,
 CC medullablastoma, malignant melanoma, and malignant neoplastic conditions
 XX
 XX Sequence 11 BP; 1 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 26 GCTTCGCTCA 35
 Db 1 GCTTCGCTCA 10
 RESULT 294
 ABV67424
 ID ABV67424 standard; CDNA; 11 BP.
 XX
 AC ABV67424;
 XX
 DT 21-OCT-2002 (first entry)
 XX
 DE Human skin EST 5210.
 XX
 KW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;
 KW immunosuppressive; antinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200253774-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 20-DEC-2001; 2001WO-EP015179.
 XX
 PR 03-JAN-2001; 2001DE-01000127.
 XX
 PA (HENK) HENKEL KGAA.
 XX
 PI Petersohn D, Conradt M, Hofmann K;
 XX
 DR WPI; 2002-590638/63.
 XX
 PT In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.
 XX
 PS Disclosure; Page 169; 1345pp; German.
 XX
 CC The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.
 CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention
 XX
 XX Sequence 11 BP; 2 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
 SQ

```
Query Match      13.0%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 10: Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

| Qy | 7 | CAACTGGTTC | 16 |
|----|---|------------|----|
| | | | |
| Db | 2 | CAACTGGTTC | 11 |

RESULT 295
ADQ33879
ID ADO33879 standard: DNA: 11 BP.

| | |
|----|---|
| AC | |
| XX | ADOQ33879; |
| XX | |
| DT | 23-SEP-2004 (first entry) |
| XX | |
| XX | Human facial skin-associated DNA fragment SEQ ID NO 1969. |
| DE | |
| XX | human facial skin; human; serial analysis of gene expression; SAGE; |
| KW | homeostasis; biochip; cosmetic; pharmaceutical; dg. |
| KW | |

OS Homo sapiens.
XX
PN DE10260928-A1

08-JUL-2004.

PF 20-DEC-2002;

PR 20-DEC-2002; 2002DE-01060928.

PA (HENK) HENKEL KGAA.

PI Petersohn D, Schlotmann K, Gassenmeier T, Holtkoetter O;

XX
XX

XX In vitro identification of genes important for facial skin, useful for
PT assessing homeostasis and in screening for pharmaceutical or cosmetic
PT agents, based on differential expression analysis.

PS Claim 5: SEO ID NO 1969: 577pp: German.

This invention describes a novel *in vitro* method for identifying genes that are significant for facial skin in humans. The method comprises recovering, from facial skin, a first mixture of genetically expressed (transcribed and optionally translated) factors (i.e. proteins, mRNA or their fragments), recovering a second, similar mixture from some other human tissue, preferably skin from a protected area, especially from the breast and subjecting the mixtures to serial analysis of gene expression (SAGE) to identify those genes for which expression is markedly different between facial skin and the other tissue. The invention also describes an *in vitro* method for determining homeostasis of human facial skin; a test kit which comprises a solid support (flexible or rigid) on which are immobilised probes that bind specifically to the factors of interest and a biochip for determining homeostasis of human facial skin. The products of the invention are also used in a method which determines activity of cosmetic and pharmaceutical agents for use against disorders or disturbances of the homeostasis of human skin and a screening method for identifying cosmetic and pharmaceutical agents. The method allows identification of as many as possible of the genes important for facial skin and thus of a very wide range of potential therapeutic and cosmetic agents. ADQ1911-ADQ3511 represent human DNA Tag fragments used to identify the facial skin-associated genes described in the invention.

Sequence 11 BP: 2 A: 3 C: 2 G: 4 T: 0 U: 0 Other: 0

```
Query Match      13.0%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 10: Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 7 CAACTGGTTC 16
Db 2 CAACTGGTTC 11

RESULT 296

ABI09737/c
ID ABI09737 standard; DNA; 12 BP.

AC ABI09737:

DT 22-FEB-2002 (first entry)

DE Oligonucleotide primer SEQ ID NO 309710 for detecting SNP TSC0023629.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW
KW
KW
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW
central nervous system; gastrointestinal; respiratory; immune; metabolic;
KW

XX Homo sapiens.

PN WQ200177384-A2

18-OCT-2001.

YY DE 06-APR-2001:

XX
PP 07-288-2000. 2000DE-01019173

XX PA (EPIC-) EPIGENOMICS AG

XX
DT
01ok X
Dienstenboek C

XX
DP
WDT: 2001-657177/75

| | |
|----|---|
| XX | Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status. |
| PT | |
| PT | |
| PT | |

XX
PS Claim 1: SEQ ID NO 309710: 29pp + Sequence Listing: German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABJ00010-ABJ2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published/pct/sequences

SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels

61 TTAACCAAAC 70
Ov

Db 11 TTAACCAAC 2

RESULT 297

ABI65343/C
ID ABI65343 standard: DNA: 12 BP.

AA
AC
ABT65343:

DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide primer SEQ ID NO 365316 for detecting SNP TSC0055041.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 365316; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 Db 10 TTAACCAAC 1
 RESULT 298
 ABI45658
 ID ABI45658 standard; DNA; 12 BP.
 XX AC ABI45658;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 345631 for detecting SNP TSC0044116.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 345631; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 7 A; 4 C; 0 G; 1 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ACCTAACCAAC 10
 Db 3 ACCTAACCAAC 12
 RESULT 299
 ABI59784/C
 ID ABI59784 standard; DNA; 12 BP.
 XX AC ABI59784;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 359757 for detecting SNP TSC0051739.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 359757; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02; Mismatches 0; Indels 0; Gaps 0;

XX Qy 59 CCTTAACCAA 68
Db 10 CCTTAACCAA 1
|||||

RESULT 300
ABI17394/C
ID ABI17394 standard; DNA; 12 BP.
XX AC ABI17394;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 317367 for detecting SNP TSC0027954.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 317367; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02; Mismatches 0; Indels 0; Gaps 0;

XX Qy 60 CTTAACCAA 69
Db 12 CTTAACCAA 3
|||||

RESULT 301
ABI03395
ID ABI03395 standard; DNA; 12 BP.
XX AC ABI03395;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 303368 for detecting SNP TSC0020451.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 303368; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02; Mismatches 0; Indels 0; Gaps 0;

XX Qy 61 TTAACCAAC 70
Db 3 TTAACCAAC 12
|||||

XX PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 354078; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 2 TTAACCAAC 11
 RESULT 305
 ABI19658/C
 ID ABI19658 standard; DNA; 12 BP.
 XX AC ABI19658;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 319631 for detecting SNP TSC0029333.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 319631; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 2 TTAACCAAC 11
 RESULT 305
 ABI19658/C
 ID ABI19658 standard; DNA; 12 BP.
 XX AC ABI19658;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 319631 for detecting SNP TSC0029333.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 319631; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 2 TTAACCAAC 11
 RESULT 306
 ABH86118
 ID ABH86118 standard; DNA; 12 BP.
 XX AC ABH86118;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 286111 for detecting SNP TSC0012585.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 286111; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

```

Query Match      13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      61 TTAACCAAAAC 70
Db      1 TTAACCAAAAC 10

RESULT 307
ABI38806/c
ID      ABI38806 standard; DNA; 12 BP.
XX
AC      ABI38806;
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide primer SEQ ID NO 338779 for detecting SNP TSC0040670.
XX
KW      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS      Homo sapiens.
XX
PN      WO200177384-A2.
XX
PD      18-OCT-2001.
XX
PF      06-APR-2001; 2001WO-IB000713.
XX
PR      07-APR-2000; 2000DE-01019173.
XX
PA      (EPiG-) EPIGENOMICS AG.
XX
PI      Olek A, Piepenbrock C, Berlin K;
XX
PW      WPI; 2001-657177/75.
XX
PT      Set of oligonucleotides, useful for diagnosis and cell typing, is
PT      designed to detect single-nucleotide polymorphisms and cytosine
PT      methylation status.
XX
PS      Claim 1; SEQ ID NO 338779; 29pp + Sequence Listing; German.
XX
CC      This invention describes novel oligonucleotide primers or peptide nucleic
CC      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC      and cytosine methylation status in chemically pretreated genomic DNA. The
CC      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC      range of diseases including immune system, gastrointestinal, respiratory,
CC      central nervous system, cardiovascular and metabolic disorders. The
CC      oligomers are also used for detecting cell type differentiation. ABC00010
CC      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC      represent the oligomers described in the invention. NOTE: The sequence
CC      data for this patent did not form part of the printed specification, but
CC      was obtained in electronic format from WIPO at
CC      ftp.wipo.int/pub/published_pct_sequences
XX
SQ      Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      61 TTAACCAAAAC 70
Db      12 TTAACCAAAAC 3

RESULT 308
ABI59211
ID      ABI59211 standard; DNA; 12 BP.
XX

```

```

AC      ABI59211;
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide primer SEQ ID NO 359184 for detecting SNP TSC0051496.
XX
KW      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS      Homo sapiens.
XX
PN      WO200177384-A2.
XX
PD      18-OCT-2001.
XX
PF      06-APR-2001; 2001WO-IB000713.
XX
PR      07-APR-2000; 2000DE-01019173.
XX
PA      (EPiG-) EPIGENOMICS AG.
XX
PI      Olek A, Piepenbrock C, Berlin K;
XX
PW      WPI; 2001-657177/75.
XX
PT      Set of oligonucleotides, useful for diagnosis and cell typing, is
PT      designed to detect single-nucleotide polymorphisms and cytosine
PT      methylation status.
XX
PS      Claim 1; SEQ ID NO 359184; 29pp + Sequence Listing; German.
XX
CC      This invention describes novel oligonucleotide primers or peptide nucleic
CC      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC      and cytosine methylation status in chemically pretreated genomic DNA. The
CC      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC      range of diseases including immune system, gastrointestinal, respiratory,
CC      central nervous system, cardiovascular and metabolic disorders. The
CC      oligomers are also used for detecting cell type differentiation. ABC00010
CC      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC      represent the oligomers described in the invention. NOTE: The sequence
CC      data for this patent did not form part of the printed specification, but
CC      was obtained in electronic format from WIPO at
CC      ftp.wipo.int/pub/published_pct_sequences
XX
SQ      Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      61 TTAACCAAAAC 70
Db      3 TTAACCAAAAC 12

RESULT 309
ABI43165/c
ID      ABI43165 standard; DNA; 12 BP.
XX
AC      ABI43165;
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide primer SEQ ID NO 343138 for detecting SNP TSC0004795.
XX
KW      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS      Homo sapiens.
XX
PN      WO200177384-A2.

```

XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 343138; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 10 TTAACCAAC 1
 RESULT 310
 ABIS9785/c
 ID ABI59785 standard; DNA; 12 BP.
 XX AC ABI59785;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide primer SEQ ID NO 359758 for detecting SNP TSC0051738.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 343138; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 10 TTAACCAAC 1

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 359758; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 3 A; 1 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 CCTTAACCAA 68
 DB 10 CCTTAACCAA 1
 RESULT 311
 ABI63788/c
 ID ABI63788 standard; DNA; 12 BP.
 XX AC ABI63788;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide primer SEQ ID NO 363761 for detecting SNP TSC0054045.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 363761; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 CTTAACCAAA 69
DB 12 CTTAACCAAA 3

RESULT 312
ABH79977/C
ID ABH79977 standard; DNA; 12 BP.
XX
XX
AC ABH79977;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 279970 for detecting SNP TSC0007985.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX
PS Claim 1; SEQ ID NO 279970; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAC 70

DB 10 TTAACCAAC 1

RESULT 313
ABH84854
ID ABH84854 standard; DNA; 12 BP.
XX
XX AC ABH84854;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 284847 for detecting SNP TSC0012028.

XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX
PS Claim 1; SEQ ID NO 284847; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAC 70
DB 2 TTAACCAAC 11

RESULT 314
ABH88716
ID ABH88716 standard; DNA; 12 BP.
XX
XX AC ABH88716;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 288709 for detecting SNP TSC0013639.

```

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 288709; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 CTTAACCACAA 69
Db 1 CTTAACCACAA 10
|||||
|

RESULT 315
ABI64791/c
ID ABI64791 standard; DNA; 12 BP.
XX
XX ABI64791;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 364764 for detecting SNP TSC0054705.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX
XX Claim 1; SEQ ID NO 364764; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 11 TTAACCAAC 2
|||||
|

RESULT 316
ABI02552
ID ABI02552 standard; DNA; 12 BP.
XX
XX ABI02552;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 302525 for detecting SNP TSC0020048.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 302525; 29pp + Sequence Listing; German.

```

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 12 BP; 2 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
SQ Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 57 CCCCTTAACC 66
DB 2 CCCCTTAACC 11
|||||

RESULT 317
ABI23793/C
ID ABI23793 standard; DNA; 12 BP.
XX AC ABI23793;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 323766 for detecting SNP TSC0031594.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 323766; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CCTAACCAACT 11
DB 11 CCTAACCAACT 2
|||||

RESULT 318
ABI30774
ID ABI30774 standard; DNA; 12 BP.
XX AC ABI30774;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 330747 for detecting SNP TSC0035716.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 330747; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 CTTAACCAAA 69
DB 3 CTTAACCAAA 12
|||||

RESULT 319

| | |
|--------------------------|---|
| ABI50579/c | |
| ID | ABI50579 standard; DNA; 12 BP. |
| XX | |
| AC | ABI50579; |
| XX | |
| DT | 22-FEB-2002 (first entry) |
| XX | |
| DE | Oligonucleotide primer SEQ ID NO 350552 for detecting SNP TSC0046746. |
| XX | |
| KW | SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; |
| KW | peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; |
| KW | central nervous system; gastrointestinal; respiratory; immune; metabolic. |
| XX | |
| OS | Homo sapiens. |
| XX | |
| PN | W0200177384-A2. |
| XX | |
| PD | 18-OCT-2001. |
| XX | |
| PF | 06-APR-2001; 2001WO-IB000713. |
| XX | |
| PR | 07-APR-2000; 2000DE-01019173. |
| XX | |
| PA | (EPIG-) EPIGENOMICS AG. |
| XX | |
| PI | Olek A, Piepenbrock C, Berlin K; |
| XX | |
| DR | WPI; 2001-657177/75. |
| XX | |
| PT | Set of oligonucleotides, useful for diagnosis and cell typing, is |
| PT | designed to detect single-nucleotide polymorphisms and cytosine |
| PT | methylation status. |
| XX | |
| PS | Claim 1; SEQ ID NO 350552; 29pp + Sequence Listing; German. |
| XX | |
| CC | This invention describes novel oligonucleotide primers or peptide nucleic |
| CC | acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) |
| CC | and cytosine methylation status in chemically pretreated genomic DNA. The |
| CC | oligonucleotides are used for diagnosis and/or prognosis of cancer and a |
| CC | range of diseases including immune system, gastrointestinal, respiratory, |
| CC | central nervous system, cardiovascular and metabolic disorders. The |
| CC | oligomers are also used for detecting cell type differentiation. ABC00010 |
| CC | -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 |
| CC | represent the oligomers described in the invention. NOTE: The sequence |
| CC | data for this patent did not form part of the printed specification, but |
| CC | was obtained in electronic format from WIPO at |
| CC | ftp.wipo.int/pub/published_pct_sequences |
| XX | |
| SQ | Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 U; 0 Other; |
| | |
| Query Match | 13.0%; Score 10; DB 1; Length 12; |
| Best Local Similarity | 100.0%; Pred. No. 1.7e+02; |
| Matches 10; Conservative | 0; Mismatches 0; Indels 0; Gaps 0 |
| | |
| Qy | 1 ACCTAACAAAC 10 |
| | |
| Db | 10 ACCTAACAAAC 1 |
| | |
| RESULT 320 | |
| ABI73588 | |
| ID | ABI73588 standard; DNA; 12 BP. |
| XX | |
| AC | ABI73588; |
| XX | |
| DT | 22-FEB-2002 (first entry) |
| XX | |
| DE | Oligonucleotide primer SEQ ID NO 373561 for detecting SNP TSC0060170. |
| XX | |
| KW | SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; |
| KW | peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; |
| KW | central nervous system; gastrointestinal; respiratory; immune; metabolic. |
| XX | |

```

XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 331912; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 6 A; 4 C; 1 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 62 TAACCAACG 71
DB 2 TAACCAACG 11
|||||
RESULT 322
ABI12963/C
ID ABI12963 standard; DNA; 12 BP.
XX
XX AC ABI12963;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 312936 for detecting SNP TSC0025379.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 312936; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 60 CTTAACCAAA 69
DB 11 CTTAACCAAA 2
|||||
RESULT 323
ABI30959/C
ID ABI30959 standard; DNA; 12 BP.
XX
XX AC ABI30959;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 330932 for detecting SNP TSC0035850.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 330932; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 1 A; 1 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;

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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 62 TAACAAACG 71
Db 11 TAACAAACG 2
|||||

RESULT 324
ABH99100
ID ABH99100 standard; DNA; 12 BP.
AC ABH99100;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 299093 for detecting SNP TSC0018429.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
DE 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 299093 for detecting SNP TSC0018429.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
DE 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 299093; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 4 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Query Match 13.0%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 CCTAACCACT 11
Db 2 CCTAACCACT 11
|||||

RESULT 325
ABH77029/C
ID ABH77029 standard; DNA; 12 BP.
XX
XX ABH77029;
XX
XX

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DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 277022 for detecting SNP TSC0004361.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
DE 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 277022; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
Db 12 ACCTAACAC 3
|||||

RESULT 326
ABH97236
ID ABH97236 standard; DNA; 12 BP.
XX
XX
AC ABH97236;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 297229 for detecting SNP TSC0017489.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX

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XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPiG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 297229; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 5 A; 5 C; 1 G; 1 T; 0 U; 0 Other;
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 5 A; 5 C; 1 G; 1 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 62 TTAACCAACG 71
 DB 2 TTAACCAACG 11
 RESULT 327
 ABH99235
 ID ABH99235 standard; DNA; 12 BP.
 XX ABH99235;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide primer SEQ ID NO 299228 for detecting SNP TSC0018484.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX (EPiG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.
 XX Claim 1; SEQ ID NO 299228; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 2 TTAACCAAC 11
 RESULT 328
 ABI30664/C
 ID ABI30664 standard; DNA; 12 BP.
 XX ABI30664;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide primer SEQ ID NO 330637 for detecting SNP TSC0035624.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPiG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 330637; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAAAC 70

Db 12 TTAACCAAAAC 3

RESULT 329

ABI33514
 ID ABI33514 standard; DNA; 12 BP.

AC ABI33514;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 333487 for detecting SNP TSC0037567.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 333487; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 5 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 64 ACCAAAGCTT 73

Db 1 ACCAAAGCTT 10

RESULT 330

ABI09821/C
 ID ABI09821 standard; DNA; 12 BP.

XX ABI09821;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 309794 for detecting SNP TSC0023681.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 309794; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAAAC 70

Db 11 TTAACCAAAAC 2

RESULT 331

ABH82935
 ID ABH82935 standard; DNA; 12 BP.

XX ABH82935;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 282928 for detecting SNP TSC0011061.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 282928; 29pp + Sequence Listing; German.
 PS
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989, and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 Db 3 TTAACCAAC 12
 |||||
 RESULT 332
 ABI42230/C
 ID ABI42230 standard; DNA; 12 BP.
 XX
 AC ABI42230;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide primer SEQ ID NO 342203 for detecting SNP TSC0004659.
 DE
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 342203; 29pp + Sequence Listing; German.
 PS
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989, and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 60 CTTAACCAAA 69
 Db 12 CTTAACCAAA 3
 |||||
 RESULT 333
 ABI01424/C
 ID ABI01424 standard; DNA; 12 BP.
 XX
 AC ABI01424;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide primer SEQ ID NO 301397 for detecting SNP TSC0019480.
 DE
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 301397; 29pp + Sequence Listing; German.
 PS
 CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ACCTAACAC 10
 DB 11 ACCTAACAC 2
 |||||

RESULT 334
 ABH81224
 ID ABH81224 standard; DNA; 12 BP.
 XX
 AC ABH81224;
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 281217 for detecting SNP TSC0009555.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 281217; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 2 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 57 CCCTTTAAC 66
 DB 3 CCCTTTAAC 12
 |||||

RESULT 335
 ABI72260
 ID ABI72260 standard; DNA; 12 BP.
 XX
 AC ABI72260;
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 372233 for detecting SNP TSC0000966.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 372233; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 5 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 62 TAACCAAC 71
 DB 3 TAACCAAC 12
 |||||

RESULT 336
 ABC46847
 ID ABC46847 standard; DNA; 13 BP.


```

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 59054; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 CCTAACAACT 11
Db 2 CCTAACAACT 11
|||||
RESULT 339
ABF18554/C
ID ABF18554 standard; DNA; 13 BP.
XX
AC ABF18554;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 118551 for detecting SNP TSC0029616.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 118551; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 CCTAACAACT 11
Db 2 CCTAACAACT 11
|||||
RESULT 340
ABF39264/C
ID ABF39264 standard; DNA; 13 BP.
XX
AC ABF39264;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 139261 for detecting SNP TSC0034880.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 139261; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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| | |
|----------------|---|
| Qy | 62 TAACCAACG 71 |
| Dd | 10 TAACCAACG 1 |
| RESULT 341 | |
| ID | ABF41979 standard; DNA; 13 BP. |
| XX | AC AC |
| XX | ABF41979; |
| DT | 21-FEB-2002 (first entry) |
| DE | Oligonucleotide SEQ ID NO 141976 for detecting SNP TSC0035562. |
| XX | SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; |
| KW | peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; |
| KW | central nervous system; gastrointestinal; respiratory; immune; metabolic. |
| OS | Homo sapiens. |
| XX | WO200177384-A2. |
| XX | 18-OCT-2001. |
| XX | 06-APR-2001; 2001WO-IB000713. |
| XX | 07-APR-2000; 2000DE-01019173. |
| PA | (EPIG-) EPIGENOMICS AG. |
| PI | Olek A, Piepenbrock C, Berlin K; |
| WI | PI; 2001-657177/75. |
| XX | Set of oligonucleotides, useful for diagnosis and cell typing, is |
| PT | designed to detect single-nucleotide polymorphisms and cytosine |
| PD | methylation status. |
| XX | Claim 1; SEQ ID NO 141976; 29pp + Sequence Listing; German. |
| XX | This invention describes novel oligonucleotide primers or peptide nucleic |
| CC | acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) |
| CC | and cytosine methylation status in chemically pretreated genomic DNA. The |
| CC | oligonucleotides are used for diagnosis and/or prognosis of cancer and a |
| CC | range of diseases including immune system, gastrointestinal, respiratory, |
| CC | central nervous system, cardiovascular and metabolic disorders. The |
| CC | oligomers are also used for detecting cell type differentiation. ABC00010 |
| CC | -ABC99989, ABF00010-ABH99989, ABH00010-ABH99989 and ABI00010-ABI82073 |
| CC | represent the oligomers described in the invention. NOTE: The sequence |
| CC | data for this patent did not form part of the printed specification, but |
| CC | was obtained in electronic format from WIPO at |
| CC | ftp.wipo.int/pub/published_pct_sequences |
| XX | Sequence 13 BP; 7 A; 3 C; 1 G; 1 T; 0 U; 1 Other; |
| XX | This invention describes novel oligonucleotide primers or peptide nucleic |
| CC | acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) |
| CC | and cytosine methylation status in chemically pretreated genomic DNA. The |
| CC | oligonucleotides are used for diagnosis and/or prognosis of cancer and a |
| CC | range of diseases including immune system, gastrointestinal, respiratory, |
| CC | central nervous system, cardiovascular and metabolic disorders. The |
| CC | oligomers are also used for detecting cell type differentiation. ABC00010 |
| CC | -ABC99989, ABF00010-ABH99989, ABH00010-ABH99989 and ABI00010-ABI82073 |
| CC | represent the oligomers described in the invention. NOTE: The sequence |
| CC | data for this patent did not form part of the printed specification, but |
| CC | was obtained in electronic format from WIPO at |
| CC | ftp.wipo.int/pub/published_pct_sequences |
| XX | Sequence 13 BP; 7 A; 3 C; 1 G; 1 T; 0 U; 1 Other; |
| XX | Query Match 13.0%; Score 10; DB 1; Length 13; |
| XX | Best Local Similarity 100.0%; Pred. No. 1.9e+02; |
| XX | Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| Qy | 63 AACCAACGT 72 |
| Dd | 4 AACCAACGT 13 |
| RESULT 342 | |
| ID | ABC05273 standard; DNA; 13 BP. |
| XX | ABC05273 |
| AC | ABC05273; |
| XX | 20-FEB-2002 (first entry) |
| DT | |
| XX | |

```

XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 37124; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 61 TTAACCAAAAC 70
Db 3 TTAACCAAAAC 12
RESULT 344
ABC39242/C
ID ABC39242 standard; DNA; 13 BP.
XX AC ABC39242;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39259 for detecting SNP TSC0012030.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 39259; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 61 TTAACCAAAAC 70
Db 13 TTAACCAAAAC 4
RESULT 345
ABF18555
ID ABF18555 standard; DNA; 13 BP.
XX AC ABF18555;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 118552 for detecting SNP TSC0029616.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 118552; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

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CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
Db 4 ACCTAACAC 13

RESULT 346
ABF28758/c
ID ABF28758 standard; DNA; 13 BP.
XX
AC ABF28758;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 128755 for detecting SNP TSC0032232.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 128755; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ASC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
Db 12 ACCTAACAC 3

RESULT 347
ABF42612/c
ID ABF42612 standard; DNA; 13 BP.
XX
AC ABF42612;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 142609 for detecting SNP TSC0035750.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 142609; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ASC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 CCCTTAACCA 67
Db 10 CCCTTAACCA 1

RESULT 348
ABF76364/c
ID ABF76364 standard; DNA; 13 BP.
XX
AC ABF76364;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 176361 for detecting SNP TSC0043771.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

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XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 176361; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 1 A; 0 C; 8 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
QY 56 GCCCCTTAACCA 67
DB 13 RCCCTCAACCA 2
RESULT 349
ABH26674/c
ID ABH26674 standard; DNA; 13 BP.
XX AC ABH26674;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 226651 for detecting SNP TSC0055246.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 226651; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 1 A; 0 C; 8 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
QY 56 GCCCCTTAACCA 67
DB 13 RCCCTCAACCA 2
RESULT 350
ABH04438/c
ID ABH04438 standard; DNA; 13 BP.
XX AC ABH04438;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 204415 for detecting SNP TSC0005095.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 204415; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 60 CTTAACCAAA 69
DB 13 CTTAACCAAA 4
RESULT 350
ABH04438/c
ID ABH04438 standard; DNA; 13 BP.
XX AC ABH04438;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 204415 for detecting SNP TSC0005095.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 204415; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 60 CTTAACCAAA 69
DB 13 CTTAACCAAA 4

```


CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 0 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 12 ACCTAACCAAC 3
 RESULT 351
 ABH33480/c
 ID ABH33480 standard; DNA; 13 BP.
 XX
 AC ABH33480;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 233457 for detecting SNP TSC0056966.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 233457; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 1 C; 4 G; 6 T; 0 U; 1 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 12 ACCTAACCAAC 3
 RESULT 351
 ABF65946/c
 ID ABF65946 standard; DNA; 13 BP.
 XX
 AC ABF65946;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 233457 for detecting SNP TSC0056966.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 233457; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 1 C; 4 G; 6 T; 0 U; 1 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 12 ACCTAACCAAC 3
 RESULT 353
 ABF65946/c
 ID ABF65946 standard; DNA; 13 BP.
 XX
 AC ABF65946;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 212829 for detecting SNP TSC0051854.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 212829; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 10 ACCTAACCAAC 1

Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 62 TAACCAACG 71
 Db 12 TAACCAACG 3
 RESULT 352
 ABH12852/c
 ID ABH12852 standard; DNA; 13 BP.
 XX
 AC ABH12852;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 212829 for detecting SNP TSC0051854.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 212829; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 10 ACCTAACCAAC 1
 RESULT 353
 ABF65946/c
 ID ABF65946 standard; DNA; 13 BP.
 XX
 AC ABF65946;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 212829 for detecting SNP TSC0051854.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 212829; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ACCTAACCAAC 10
 Db 10 ACCTAACCAAC 1

```

XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 165943 for detecting SNP TSC0007423.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 165943; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 61 TTAACCAAC 70
Db 10 TTAACCAAC 1
|||||
RESULT 354
ABH66896/C
ID ABH66896 standard; DNA; 13 BP.
XX
XX ABH66896;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 266873 for detecting SNP TSC0007156.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 266873; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 61 TTAACCAAC 70
Db 10 TTAACCAAC 1
|||||
RESULT 355
ABC31046/C
ID ABC31046 standard; DNA; 13 BP.
XX
XX ABC31046;
XX
XX 20-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 31063 for detecting SNP TSC0009581.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 266873; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 CCTAACCAACT 11
Db 12 CCTAACCAACT 3
|||||

```

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 31063; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, cardiovascular, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 58 CCCTTAACCA 67
DB 10 CCCTTAACCA 1

RESULT 356

ABC39241
ID ABC39241 standard; DNA; 13 BP.

XX ABC39241;

XX 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 39258 for detecting SNP TSC0012030.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 39258; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAC 70
DB 1 TTAACCAAC 10

RESULT 357

ABH26675
ID ABH26675 standard; DNA; 13 BP.

XX ABH26675;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 226652 for detecting SNP TSC0055246.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 226652; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 CTTAACCAAA 69
|||||

```

Db      1 CTTAACCAAA 10

RESULT 358
ABH04439
ID ABH04439 standard; DNA; 13 BP.
AC ABH04439;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 204416 for detecting SNP TSC0005095.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 204416; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 6 C; 0 G; 1 T; 0 U; 0 Other;
XX
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ACCTAACCAAC 10
Db      2 ACCTAACCAAC 11

RESULT 359
ABF91029
ID ABF91029 standard; DNA; 13 BP.
XX
AC ABF91029;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 191026 for detecting SNP TSC0046996.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 204416; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 5 C; 0 G; 1 T; 0 U; 0 Other;
XX
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ACCTAACCAAC 10
Db      3 ACCTAACCAAC 12

RESULT 360
ABH60594/c
ID ABH60594 standard; DNA; 13 BP.
XX
AC ABH60594;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 260571 for detecting SNP TSC0008589.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX

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XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 260571; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACCAAC 10
Db 10 ACCTAACCAAC 1

RESULT 361
ABH60861
ID ABH60861 standard; DNA; 13 BP.
AC ABH60861;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 260838 for detecting SNP TSC0063327.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 260838; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACCAAC 10
Db 10 ACCTAACCAAC 1

RESULT 362
ABH66897
ID ABH66897 standard; DNA; 13 BP.
AC ABH66897;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 266874 for detecting SNP TSC0007156.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 266874; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 4 TTAACCAAC 13

RESULT 362
ABH66897
ID ABH66897 standard; DNA; 13 BP.
AC ABH66897;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 266874 for detecting SNP TSC0007156.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 266874; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

```

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SQ Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 CCTAACAACT 11
Db 2 CCTAACAACT 11

RESULT 363
ABC88860/c
ID ABC88860 standard; DNA; 13 BP.
XX
AC ABC88860;
XX
XX 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 88877 for detecting SNP TSC0022337.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 88877; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 2 C; 5 G; 3 T; 0 U; 1 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1.9e+02;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 64 ACCAAAGCTTAG 75
Db 13 RCCAAAGCTTGC 2

RESULT 364
ABF23807

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```

ID ABF23807 standard; DNA; 13 BP.
XX
XX ABF23807;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 123804 for detecting SNP TSC0030951.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 123804; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 CCTAACAACT 11
Db 2 CCTAACAACT 11

RESULT 365
ABF33316/c
ID ABF33316 standard; DNA; 13 BP.
XX
XX ABF33316;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 133313 for detecting SNP TSC0033258.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.

```

XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 133313; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 1 A; 0 C; 4 G; 8 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 13;
 XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ACCTAACAC 10
 DB 12 ACCTAACAC 3
 RESULT 366
 ABH33483
 ID ABH33483 standard; DNA; 13 BP.
 XX AC ABH33483;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 233460 for detecting SNP TSC0056966.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 252866; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 1 A; 0 C; 4 G; 8 T; 0 U; 0 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 13;
 XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ACCTAACAC 10
 DB 12 ACCTAACAC 3
 RESULT 366
 ABH33483
 ID ABH33483 standard; DNA; 13 BP.
 XX AC ABH33483;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 233460 for detecting SNP TSC0056966.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 252866; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 233460; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 4 C; 2 G; 1 T; 0 U; 1 Other;
 XX Query Match 13.0%; Score 10; DB 1; Length 13;
 XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 62 TAACCAACG 71
 DB 2 TAACCAACG 11
 RESULT 367
 ABH52889
 ID ABH52889 standard; DNA; 13 BP.
 XX AC ABH52889;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 252866 for detecting SNP TSC0061685.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 252866; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAC 70
 Db 2 TTAACCAAC 11
 |||||

RESULT 368
 ABF13967
 ID ABF13967 standard; DNA; 13 BP.
 XX AC ABF13967;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 113964 for detecting SNP TSC0028531.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN W0200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 113964; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 7 A; 5 C; 0 G; 1 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAC 70
 Db 2 TTAACCAAC 11
 |||||

RESULT 369
 ABF23806/C
 ID ABF23806 standard; DNA; 13 BP.
 XX AC ABF23806;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 123803 for detecting SNP TSC0030951.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN W0200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 123803; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CCTAACCACT 11
 Db 12 CCTAACCACT 3
 |||||

RESULT 370
 ABF54935
 ID ABF54935 standard; DNA; 13 BP.
 XX AC ABF54935;
 XX
 DT 21-FEB-2002 (first entry)


```

XX PS Claim 1; SEQ ID NO 139262; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 4 C; 1 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 62 TTAACCAACG 71
Db 4 TTAACCAACG 13
|||||
4 TTAACCAACG 13

RESULT 373
ABF69781
ID ABF69781 standard; DNA; 13 BP.
XX AC ABF69781;
XX XX
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 169778 for detecting SNP TSC0042403.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PT WPI; 2001-657177/75.
XX DR
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 169778; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAC 70
Db 4 TTAACCAAAC 13
|||||
4 TTAACCAAAC 13

RESULT 374
ABF78918/c
ID ABF78918 standard; DNA; 13 BP.
XX AC ABF78918;
XX XX
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 178915 for detecting SNP TSC0044309.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PT WPI; 2001-657177/75.
XX DR
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 178915; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 61 TTAACCAAAC 70
Db 12 TTAACCAAAC 3
|||||
12 TTAACCAAAC 3

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RESULT 375
ABH33482/C
ID ABH33482 standard; DNA; 13 BP.
XX
XX AC ABH33482;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 233459 for detecting SNP TSC0056966.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPiG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 233459; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 1 A; 2 C; 4 G; 5 T; 0 U; 1 Other;
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 62 TAACCAACG 71
XX
XX DB 12 TAACCAACG 3
XX
XX RESULT 376
ABH12853
ID ABH12853 standard; DNA; 13 BP.
XX
XX AC ABH12853;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 212830 for detecting SNP TSC0051854.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPiG-) EPIGENOMICS AG.

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KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPiG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 212830; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ACCTAACCAAC 10
XX
XX DB 4 ACCTAACCAAC 13
XX
XX RESULT 377
ABH60595
ID ABH60595 standard; DNA; 13 BP.
XX
XX AC ABH60595;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 260572 for detecting SNP TSC0008589.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPiG-) EPIGENOMICS AG.

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XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 260572; 29pp + Sequence Listing; German.
XX SS
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ACCTAACAC 10
Db 4 ACCTAACAC 13

RESULT 378
ABF09199
ID ABF09199 standard; DNA; 13 BP.
XX AC ABF09199;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 109196 for detecting SNP TSC0027324.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PP 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PS WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 109196; 29pp + Sequence Listing; German.
XX SS
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ACCTAACAC 10
Db 4 ACCTAACAC 13

RESULT 379
ABC66915
ID ABC66915 standard; DNA; 13 BP.
XX AC ABC66915;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 66932 for detecting SNP TSC0017540.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PP 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PS WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 66932; 29pp + Sequence Listing; German.
XX SS
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

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XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 37764; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 4 C; 0 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 ACCTAACAC 10
Db 4 ACCTAACAC 13
|||||
|
RESULT 383
ABC88861
ID ABC88861 standard; DNA; 13 BP.
XX
XX ACB88861;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 88878 for detecting SNP TSC0022337.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 37764; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 4 C; 0 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 ACCTAACAC 10
Db 4 ACCTAACAC 13
|||||
|
RESULT 384
ABF33317
ID ABF33317 standard; DNA; 13 BP.
XX
XX ABF33317;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 133314 for detecting SNP TSC0033258.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 133314; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010

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CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 4 C; 0 G; 1 T; 0 U; 0 Other;

  Query Match      13.0%; Score 10; DB 1; Length 13;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACCAAC 10
    |||||
Db 2 ACCTAACCAAC 11
    |||||

RESULT 385
ABH34876/c
ID ABH34876 standard; DNA; 13 BP.
XX
AC ABH34876;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 234853 for detecting SNP TSC0057331.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 234853; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match      13.0%; Score 10; DB 1; Length 13;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 CCTTAACCAA 68
    |||||
Db 13 CCTTAACCAA 4
    |||||

RESULT 386
ABF67071
ID ABF67071 standard; DNA; 13 BP.
XX
AC ABF67071;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 167068 for detecting SNP TSC0009524.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 167068; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

  Query Match      13.0%; Score 10; DB 1; Length 13;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 CCTTAACCAA 69
    |||||
Db 1 CCTTAACCAA 10
    |||||

RESULT 387
ABF13966/c
ID ABF13966 standard; DNA; 13 BP.
XX
AC ABF13966;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 113963 for detecting SNP TSC0028531.

```


XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ACCTAACCAAC 10
DB 10 ACCTAACCAAC 1
|||||

RESULT 390
ABH52029
ID ABH52029 standard; DNA; 13 BP.
XX AC ABH52029;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 252006 for detecting SNP TSC0061490.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 252006; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 CTTAACCAAA 69
DB 1 CTTAACCAAA 10
|||||

RESULT 391
ABF99752/C
ID ABF99752 standard; DNA; 13 BP.
XX AC ABF99752;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 199749 for detecting SNP TSC0009781.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 199749; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAA 70
DB 11 TTAACCAAA 2
|||||

RESULT 392

XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 234854; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 CCTTAACCAA 68
 DB 1 CCTTAACCAA 10
 RESULT 395
 ABC46846/c
 ID ABC46846 standard; DNA; 13 BP.
 XX AC ABC46846;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 46863 for detecting SNP TSC0013497.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 46863; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 12 TTAACCAAC 3
 RESULT 396
 ABF01562/c
 ID ABF01562 standard; DNA; 13 BP.
 XX AC ABF01562;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 101559 for detecting SNP TSC0025290.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 101559; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 12 TTAACCAAC 3
 RESULT 396
 ABF01562/c
 ID ABF01562 standard; DNA; 13 BP.
 XX AC ABF01562;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 101559 for detecting SNP TSC0025290.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 101559; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 10 TTAACCAAC 1

RESULT 397
ABF09198/c
ID ABF09198 standard; DNA; 13 BP.
XX AC ABF09198;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109195 for detecting SNP TSC0027324.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109195; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
XX
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
Db 10 ACCTAACAC 1

RESULT 398
ABC37746/c
ID ABC37746 standard; DNA; 13 BP.
XX AC ABC37746;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 14625 for detecting SNP TSC0003299.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX

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XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 14625; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 1 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 DB 12 TTAACCAAC 3
 RESULT 400
 ABC66914/c
 ID ABC66914 standard; DNA; 13 BP.
 XX
 AC ABC66914;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 66931 for detecting SNP TSC0017540.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.
 XX Claim 1; SEQ ID NO 66931; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 60 CTTAACCAAA 69
 DB 13 CTTAACCAAA 4
 RESULT 401
 ABF76365
 ID ABF76365 standard; DNA; 13 BP.
 XX
 AC ABF76365;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 176362 for detecting SNP TSC0043771.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 176362; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 8 C; 0 G; 1 T; 0 U; 1 Other;
 Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 83.3%; Pred. No. 1.9e+02;
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 56 GCCCCTTAACCA 67
 :|||||
 Db 1 RCCCTCACCA 12

RESULT 402

ABH28272/c
 ID ABH28272 standard; DNA; 13 BP.

XX AC ABH28272;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 228249 for detecting SNP TSC0055657.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX PI WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 228249; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 65 CCAACGCTTA 74

Db 13 CCAACGCTTA 4

RESULT 403

ABF54934/c
 ID ABF54934 standard; DNA; 13 BP.

XX AC ABF54934;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 154931 for detecting SNP TSC0039153.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX PI WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 154931; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 2 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 63 AACCAACGT 72

Db 10 AACCAACGT 1

RESULT 404

ABH33481
 ID ABH33481 standard; DNA; 13 BP.

XX AC ABH33481;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 233458 for detecting SNP TSC0056966.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 233458; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ASC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 6 A; 4 C; 1 G; 1 T; 0 U; 1 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 62 TTAACCAACG 71
 Db 2 TTAACCAACG 11
 RESULT 405
 ABH52888/C
 ID ABH52888 standard; DNA; 13 BP.
 XX AC ABH52888;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 252865 for detecting SNP TSC0061685.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 24668; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 252865; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ASC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
 SQ Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 TTAACCAAC 70
 Db 12 TTAACCAAC 3
 RESULT 406
 ABC24651
 ID ABC24651 standard; DNA; 13 BP.
 XX AC ABC24651;
 XX 20-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 24668 for detecting SNP TSC0005912.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 24668; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 65 CCAACGTTA 74
Db 1 CCAACGTTA 10
|||||

RESULT 407
ABC33036/c
ID ABC33036 standard; DNA; 13 BP.
XX AC ABC33036;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 33053 for detecting SNP TSC0010478.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 33053; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAAAC 70
Db 1 TTAACCAAAAC 2
|||||

RESULT 408
ABC39243
ID ABC39243 standard; DNA; 13 BP.
XX AC ABC39243;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39260 for detecting SNP TSC0012030.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39260; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 TTAACCAAAAC 70
Db 1 TTAACCAAAAC 10
|||||

RESULT 409
ABF41978/c
ID ABF41978 standard; DNA; 13 BP.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 172394; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 65 CCAACGTTA 74
Db 2 CCAACGTTA 11
|||||

RESULT 412
ABF65947
ID ABF65947 standard; DNA; 13 BP.
XX
AC ABF65947;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 165944 for detecting SNP TSC0007423.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 165944; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 4 TTAACCAAC 13
|||||

RESULT 413
ABF91028/C
ID ABF91028 standard; DNA; 13 BP.
XX
AC ABF91028;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 191025 for detecting SNP TSC0046996.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 191025; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY      1  ACCTAACCAAC 10
DB      11 ACCTAACCAAC 2

RESULT 414
ABF67070/c
ID  ABF67070 standard; DNA; 13 BP.
XX
AC
XX  ABF67070;
XX
DT  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 167067 for detecting SNP TSC0009524.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
PF  06-APR-2001; 2001WO-IB000713.
XX
PR  07-APR-2000; 2000DE-01019173.
XX
PA  (EPiG-) EPIGENOMICS AG.
XX
PI  Olek A, Piepenbrock C, Berlin K;
XX
XX  WPI; 2001-657177/75.
XX
PT  Set of oligonucleotides, useful for diagnosis and cell typing, is
PT  designed to detect single-nucleotide polymorphisms and cytosine
PT  methylation status.
XX
PS  Claim 1; SEQ ID NO 167067; 29pp + Sequence Listing; German.
XX
CC  This invention describes novel oligonucleotide primers or peptide nucleic
CC  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC  and cytosine methylation status in chemically pretreated genomic DNA. The
CC  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC  range of diseases including immune system, gastrointestinal, respiratory,
CC  central nervous system, cardiovascular and metabolic disorders. The
CC  oligomers are also used for detecting cell type differentiation. ABC00010
CC  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC  represent the oligomers described in the invention. NOTE: The sequence
CC  data for this patent did not form part of the printed specification, but
CC  was obtained in electronic format from WIPO at
CC  ftp.wipo.int/pub/published_pct_sequences
XX
XX  Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
XX
CC  This invention describes novel oligonucleotide primers or peptide nucleic
CC  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC  and cytosine methylation status in chemically pretreated genomic DNA. The
CC  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC  range of diseases including immune system, gastrointestinal, respiratory,
CC  central nervous system, cardiovascular and metabolic disorders. The
CC  oligomers are also used for detecting cell type differentiation. ABC00010
CC  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC  represent the oligomers described in the invention. NOTE: The sequence
CC  data for this patent did not form part of the printed specification, but
CC  was obtained in electronic format from WIPO at
CC  ftp.wipo.int/pub/published_pct_sequences
XX
XX  Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
XX
Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      60 CTTAACCAA 69
DB      13 CTTAACCAA 4

RESULT 415
ABH46508/c
ID  ABH46508 standard; DNA; 13 BP.
XX
AC  ABH46508;
XX
XX
DT  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 259846 for detecting SNP TSC0007565.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
PF  06-APR-2001; 2001WO-IB000713.
XX
DE  Oligonucleotide SEQ ID NO 246485; 29pp + Sequence Listing; German.
XX
CC  This invention describes novel oligonucleotide primers or peptide nucleic
CC  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC  and cytosine methylation status in chemically pretreated genomic DNA. The
CC  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC  range of diseases including immune system, gastrointestinal, respiratory,
CC  central nervous system, cardiovascular and metabolic disorders. The
CC  oligomers are also used for detecting cell type differentiation. ABC00010
CC  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC  represent the oligomers described in the invention. NOTE: The sequence
CC  data for this patent did not form part of the printed specification, but
CC  was obtained in electronic format from WIPO at
CC  ftp.wipo.int/pub/published_pct_sequences
XX
XX  Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
XX
Query Match      13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      59 CCTTAACCAA 68
DB      10 CCTTAACCAA 1

RESULT 416
ABH59869
ID  ABH59869 standard; DNA; 13 BP.
XX
AC  ABH59869;
XX
XX  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 259846 for detecting SNP TSC0007565.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
PF  06-APR-2001; 2001WO-IB000713.
XX

```

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XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 259846; 29pp + Sequence Listing; German.
XX XX
CC CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX XX
SQ Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 ACCTAACCAAC 10
Db 3 ACCTAACCAAC 12
RESULT 417
ABF99753
ID ABF99753 standard; DNA; 13 BP.
XX AC ABF99753;
XX XX 22-FEB-2002 (first entry)
XX XX Oligonucleotide SEQ ID NO 199750 for detecting SNP TSC0009781.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX 18-OCT-2001.
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX 07-APR-2000; 2000DE-01019173.
XX XX (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 199750; 29pp + Sequence Listing; German.
XX XX
CC CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX XX
SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 61 TTAACCAAC 70
Db 3 TTAACCAAC 12
RESULT 418
ABF65615
ID ABF65615 standard; DNA; 13 BP.
XX AC ABF65615;
XX XX 22-FEB-2002 (first entry)
XX XX Oligonucleotide SEQ ID NO 165612 for detecting SNP TSC0041528.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX 18-OCT-2001.
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX 07-APR-2000; 2000DE-01019173.
XX XX (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 165612; 29pp + Sequence Listing; German.
XX XX
CC CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX XX

```

```
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
SQ

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
Db 1 ACCTAACAC 10

RESULT 419
ABH46509
ID ABH46509 standard; DNA; 13 BP.
XX
AC ABH46509;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 246486 for detecting SNP TSC0060249.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 246486; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 1 Other;
XX
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 CCTTAACCAA 68
Db 4 CCTTAACCAA 13

RESULT 420
ABC24650/c
ID ABC24650 standard; DNA; 13 BP.
XX
AC ABC24650;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 24667 for detecting SNP TSC0005912.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 24667; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 65 CCAACGTTA 74
Db 13 CCAACGTTA 4

RESULT 421
ABF01563
ID ABF01563 standard; DNA; 13 BP.
XX
AC ABF01563;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 101560 for detecting SNP TSC0025290.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
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XX OS Homo sapiens.
XX SN WO200177384-A2.
XX PN 18-OCT-2001.
XX PD 06-APR-2001; 2001WO-IB000713.
XX PF 07-APR-2000; 2000DE-01019173.
XX PR (EPIG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 101560; 29pp + Sequence Listing; German.
XX SQ
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 61 TTAACCAAAC 70
Db 4 TTAACCAAAC 13
|||||
RESULT 422
ABF72396/C
ID ABF72396 standard; DNA; 13 BP.
XX AC ABF72396;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 172393 for detecting SNP TSC0042980.
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR (EPIG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 172393; 29pp + Sequence Listing; German.
XX SQ
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 61 TTAACCAAAC 70
Db 4 TTAACCAAAC 13
|||||
RESULT 422
ABF72396/C
ID ABF72396 standard; DNA; 13 BP.
XX AC ABF72396;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 172393 for detecting SNP TSC0007565.
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 19-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 259845; 29pp + Sequence Listing; German.
XX SQ
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The

```

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ACCTAACAC 10
 Db 11 ACCTAACAC 2

RESULT 424

ABC05272/c
 ID ABC05272 standard; DNA; 13 BP.

XX AC ABC05272;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 5263 for detecting SNP TSC0001793.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 5263; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 CCTTAACCAA 68
 Db 10 CCTTAACCAA 1

RESULT 425

ABC31047
 ID ABC31047 standard; DNA; 13 BP.

XX AC ABC31047;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 31064 for detecting SNP TSC0009581.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 31064; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 CCTTAACCAA 67
 Db 4 CCTTAACCAA 13

RESULT 426

ABF08931
 ID ABF08931 standard; DNA; 13 BP.

XX ABF08931;

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PS Claim 1; SEQ ID NO 201132; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 CCCTTAACCA 67
| | | | | | | |
Db 3 CCCTTAACCA 12

RESULT 429

ABH28273
ID ABH28273 standard; DNA; 13 BP.

XX AC ABH28273;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 228250 for detecting SNP TSC0055657.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 228250; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 65 CCAACGTTA 74
| | | | | | | |
Db 1 CCAACGTTA 10

RESULT 430

ABH52028/C
ID ABH52028 standard; DNA; 13 BP.

XX AC ABH52028;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 252005 for detecting SNP TSC0061490.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 252005; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.0%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 CTTAACCAAA 69
| | | | | | | |

[illegible]

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XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX DR
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 108927; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 ACCTAACCAAC 10
XX Db 13 ACCTAACCAAC 4
XX
XX RESULT 434
XX ID ABC37106 standard; DNA; 13 BP.
XX AC ABC37106;
XX XX
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 37123 for detecting SNP TSC0011592.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 37123; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 ACCTAACCAAC 10
XX Db 13 ACCTAACCAAC 4
XX
XX RESULT 434
XX ID ABC37106 standard; DNA; 13 BP.
XX AC ABC37106;
XX XX
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 37123 for detecting SNP TSC0011592.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 37123; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.0%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 61 TTAACCAAC 70
XX Db 11 TTAACCAAC 2
XX
XX RESULT 435
XX ID ABC39240 standard; DNA; 13 BP.
XX XX
XX AC ABC39240;
XX XX
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 39257 for detecting SNP TSC0012030.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 39257; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX

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SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
  Query Match      13.0%; Score 10; DB 1; Length 13;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 13 TTAACCAAC 4

RESULT 436
ABF19397/c
ID ABF19397 standard; DNA; 13 BP.
XX AC
AC ABF19397;
XX AC
XX 21-FEB-2002 (first entry)
XX DT
DE Oligonucleotide SEQ ID NO 119394 for detecting SNP TSC0029810.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX OS
XX WO200177384-A2.
XX PN
XX 18-OCT-2001.
XX PD
XX 06-APR-2001; 2001WO-IB000713.
XX PF
XX 07-APR-2000; 2000DE-01019173.
XX PR
XX (EPIG-) EPIGENOMICS AG.
XX PA
XX Olek A, Piepenbrock C, Berlin K;
XX PI
XX WPI; 2001-657177/75.
XX DR
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PT
XX Claim 1; SEQ ID NO 119394; 29pp + Sequence Listing; German.
XX PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
  Query Match      13.0%; Score 10; DB 1; Length 13;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 61 TTAACCAAC 70
Db 10 TTAACCAAC 1

RESULT 438
ADF35701
ID ADF35701 standard; DNA; 14 BP.
XX AC
AC ADF35701;
XX AC
XX 12-FEB-2004 (first entry)
XX DT
XX DNA vaccine carrier related oligonucleotide #5.
XX DE
XX DNA vaccine carrier; ss.
XX KW
XX Unidentified.
XX OS
XX CN1382492-A.
XX PN

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XX 04-DEC-2002.
PD
XX 18-JAN-2001; 2001CN-00105250.
PF
XX 18-JAN-2001; 2001CN-00105250.
PR
XX 18-JAN-2001; 2001CN-00105250.
PA (UYFU-) UNIV FUDAN.
XX
XX Yuan Z, Qiu H, Wen Y;
PI
XX WPI; 2003-269422/27.
DR
XX DNA vaccine carrier.
PT
XX Disclosure; Page 14; 23pp; Chinese.
PS
XX The present invention relates to a novel DNA vaccine carrier for humans.
CC The vaccine carrier is composed of cytomegalovirus (CMV)
CC promoter/enhancer, BGH transcription termination signal, a multiclonal
CC site, kanamycin resistance gene, immunostimulant of human immune system
CC and exogenous protein coding gene. The vaccine carrier can be used for
CC preventing and treating diseases. The present oligonucleotide was used to
CC illustrate the invention.
XX
SQ Sequence 14 BP; 3 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 13.0%; Score 10; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 15 TCAAGTCGTT 24
Db 1 TCAAGTCGTT 10
Search completed: October 29, 2004, 12:31:23
Job time : 3 secs

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